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Catalogue

PRESENTED BY

THE RADCLIFFE TRUSTEES

TO

*The Academy of Sciences
Munich*



THE SECOND
RADCLIFFE CATALOGUE
OF STARS.



OXFORD:

BY T. COMBE, M.A., E. B. GARDNER, E. P. HALL, AND H. LATHAM, M.A.,

Printers to the University.

SECOND
RADCLIFFE CATALOGUE,

CONTAINING

2386 STARS;

DEDUCED FROM OBSERVATIONS EXTENDING

FROM 1854 TO 1861,

AT THE

RADCLIFFE OBSERVATORY,
OXFORD;

AND REDUCED TO THE EPOCH
1860.

UNDER THE SUPERINTENDENCE OF

THE REV. ROBERT MAIN, M.A.,

RADCLIFFE OBSERVER.

PUBLISHED BY ORDER OF THE RADCLIFFE TRUSTEES.

OXFORD:

JAMES PARKER AND CO.

1870.



INTRODUCTION.

THE present Catalogue of Stars, entitled the *Second Radcliffe Catalogue*, contains the results of all the meridional Star-Observations which were made at the Radcliffe Observatory from the year 1854 to the year 1861, both inclusive. During the year 1861, the Carrington Transit-Circle was established at the Observatory, and the use of the Meridian Circle by Jones, and of the Transit Instrument, was totally discontinued at the end of that year. It was desirable, therefore, to collect the results of the observations made with those instruments, and to compile a catalogue of stars which should embody them in a definitive form.

The formation of the Catalogue was commenced three or four years ago, but the heavy pressure of business prevented much progress from being made in it till within the last two years, during which time it has been completed and printed. The whole of the work connected with it has been performed by myself and Mr. Luff, without the aid of any extra computers.

I will now describe the processes which have been used in the compilation of the Catalogue, taking the columns of the printed tables in order.

Column 1 gives the ordinal numbers of reference, and requires no explanation.

Column 2 gives the magnitude of each star observed. The magnitudes to which no asterisks are affixed are deduced from observation, the number of estimations being given in column 3. In explanation of the fractions which occur in the latter column, it may be stated that the estimation is allowed to have only half weight when a query has been put against it in the note-book of the observer. The magnitudes to which asterisks are affixed are not observed magnitudes, but are taken either from Argelander, or from the Catalogue of the British Association, or other good authority.

Column 4 contains the names of the stars; and, in assigning the designations, they are made as much as possible to harmonize with those of the Greenwich Catalogue of 2022 Stars for 1860, the order of preference being identical (or essentially so) with that given at page {x} of the Introduction to that work.

One obvious advantage of this identity of nomenclature is the facility for comparison with the Greenwich Catalogue, the epoch of the two Catalogues being the same, namely 1860.

Column 5 contains the definitive Right Ascension for each star, obtained by combination of the observations made in the different years, giving as usual weights proportional to the number of observations. The Right Ascensions are brought up to the epoch 1860 by means of the precessions, secular variations, and proper motions in columns 8, 9, and 10, the latter being (when unbracketed) those found in my own papers on Proper Motion and that of Mr. Stone*. I have rejected in general the proper motions given in the Catalogue of the British Association, as untrustworthy. The proper motions of a few stars, not given in the papers referred to, yet too considerable to be neglected, are included in brackets, and the greater number of them have been used in bringing up the stars' Right Ascensions to 1860. Since, however, it was partly the object of Mr. Johnson in his list of stars, from which this Catalogue has been formed, to include all which he could find having conspicuous proper motions as well as other interesting peculiarities, I shall feel it my duty, as soon as I have leisure, to make suitable comparisons of all the stars with ancient Catalogues for the determination of their proper motions, and to publish a list of those which require any alteration in their assigned positions through neglect of it.

The Right Ascensions set down are not those which result immediately from the combination of the separate observations, but they are affected by the corrections necessary to reduce them to the equinox assumed in the Greenwich Catalogue. The epochs of the two Catalogues being the same, it was comparatively easy to make the comparison for all the stars common to the two Catalogues which have been observed a sufficient number of times (two observations at least in both Catalogues being in general the lowest number admitted).

The following table gives the result of the comparison, the number of stars compared being 452.

* These papers are in vols. xix, xxviii, and xxxiii of the Memoirs of the Royal Astronomical Society.

Hours of Right Ascension.		Extent of Group.	Number of Oxford Observations.	Excess of Greenwich Catalogue.
h.	h.			s.
0	to 1	α Andromedæ to 41 Andromedæ ...	124	— 0·02
1	„ 2	β Andromedæ to α Arietis	107	— 0·05
2	„ 3	η Arietis to 53 Arietis	90	+ 0·02
3	„ 4	Piazzi ii. 261 to λ Tauri	106	0·00
4	„ 5	ω^1 Tauri to ϵ Leporis	106	+ 0·01
5	„ 6	λ Eridani to ν Orionis	129	— 0·03
6	„ 7	η Geminorum to γ Canis Majoris ...	106	— 0·04
7	„ 8	π Geminorum to 13 Argûs	141	— 0·03
8	„ 9	15 Argûs to ν Cancrî	82	— 0·05
9	„ 10	75 Cancrî to η Leonis	132	— 0·07
10	„ 11	Regulus to p^3 Leonis	130	— 0·08
11	„ 12	p^5 Leonis to $\circ$ Virginis	132	— 0·06
12	„ 13	α Corvi to ϵ Virginis	121	— 0·11
13	„ 14	g Virginis to 95 Virginis	144	— 0·08
14	„ 15	κ Virginis to ν Libræ	53	— 0·08
15	„ 16	i^1 Boëtis to β^2 Scorpîi	126	— 0·03
16	„ 17	e^2 Scorpîi to ϵ Herculis	104	— 0·05
17	„ 18	η Ophiuchi to 70 Ophiuchi	157	— 0·06
18	„ 19	72 Ophiuchi to ζ Aquilæ	164	— 0·05
19	„ 20	ψ Sagittarii to c Sagittarii	149	— 0·04
20	„ 21	Piazzi xix. 29 to θ Capricorni	73	— 0·08
21	„ 22	χ Capricorni to ι Aquarii	179	— 0·03
22	„ 23	ι Pegasi to h^1 Aquarii	169	— 0·02
23	„ 0	A Piscium to 33 Piscium	129	— 0·02
Sum			2953	

It will be found that the excesses of the Greenwich above the Oxford Right Ascensions, given in the table above, are very similar indeed to those in the First Radcliffe Catalogue (Introduction, p. v), so that no change in the assumed equinox seems to have taken place between the epochs of the two Catalogues, namely 1845 and 1860. Since then, as it is stated in that Introduction (p. iv), the equinox used depends fundamentally upon that used in the list of stars given in the Nautical Almanac for 1840, it is plainly desirable to make a comparison between the Right Ascension of the latter and of the Greenwich Catalogue for the same epoch, namely the Catalogue of 1439 stars. This comparison is exhibited in the following table, which requires no explanation, as the numbers are taken out without alteration from the Nautical Almanac and the Greenwich Catalogue.

Star.	Mean R.A. 1840, Jan. 1, from Greenwich Catalogue of 1439 Stars.			Seconds of R.A. from N.A.	Excess of Green- wich Cata- logue.	Star.	Mean R.A. 1840, Jan. 1, from Greenwich Catalogue of 1439 Stars.			Seconds of R.A. from N.A.	Excess of Green- wich Cata- logue.
	h.	m.	s.	s.	s.		h.	m.	s.	s.	s.
α Andromedæ	0	0	7.71	7.72	-0.01	β Corvi	12	25	59.57	59.70	-0.13
γ Pegasi	0	5	0.14	0.24	-0.10	12^2 Can. Ven.	12	48	31.93	32.08	-0.15
β Ceti	0	35	33.23	33.28	-0.05	Spica	13	16	46.25	46.36	-0.11
θ Ceti	1	16	1.56	1.65	-0.09	η Ursæ Maj.	13	41	13.65	13.66	-0.01
α Arietis	1	58	9.96	9.94	+0.02	η Boötis	13	47	3.91	4.01	-0.10
γ Ceti	2	35	0.91	1.00	-0.09	Arcturus	14	8	21.87	21.97	-0.10
α Ceti	2	53	55.32	55.35	-0.03	ϵ Boötis	14	37	59.90	60.00	-0.10
η Tauri	3	37	59.04	59.13	-0.09	α Libræ	14	42	2.21	2.30	-0.09
γ^1 Eridani	3	50	33.94	34.01	-0.07	β Libræ	15	8	24.20	24.28	-0.08
Aldebaran	4	26	44.75	44.77	-0.02	α Coronæ	15	27	54.83	54.87	-0.04
Capella	5	4	52.74	52.77	-0.03	α Serpentis	15	36	23.37	23.43	-0.06
Rigel	5	6	51.01	51.09	-0.08	β^1 Scorpii	15	56	8.50	8.58	-0.08
β Tauri	5	16	10.88	10.96	-0.08	δ Ophiuchi	16	5	57.90	58.03	-0.13
δ Orionis	5	23	50.07	50.10	-0.03	Antares	16	19	36.38	36.49	-0.11
α Leporis	5	25	50.47	40.56	-0.09	α Herculis	17	7	21.17	21.30	-0.13
ϵ Orionis	5	28	5.75	5.86	-0.11	α Ophiuchi	17	27	30.51	30.56	-0.05
α Columbæ	5	33	51.40	51.52	-0.12	γ Draconis	17	52	53.50	53.59	-0.09
α Orionis	5	46	30.64	30.71	-0.07	μ^1 Sagittarii	18	4	11.65	11.72	-0.07
μ Geminorum	6	13	16.74	16.82	-0.08	α Lyræ	18	31	31.21	31.30	-0.09
Sirius	6	38	5.89	5.92	-0.03	β^1 Lyræ	18	44	10.34	10.44	-0.10
ϵ Canis Maj.	6	52	20.26	20.39	-0.13	ζ Aquilæ	18	58	3.33	3.39	-0.06
δ Geminorum	7	10	33.68	33.83	-0.15	δ Aquilæ	19	17	25.75	25.80	-0.05
Castor	7	24	22.86	22.99	-0.13	γ Aquilæ	19	38	39.08	39.13	-0.05
Procyon	7	30	55.27	55.35	-0.08	α Aquilæ	19	42	58.50	58.56	-0.06
Pollux	7	35	30.96	31.07	-0.11	β Aquilæ	19	47	27.12	27.22	-0.10
15 Argûs	8	0	43.82	44.08	-0.26	α^2 Capricorni	20	9	10.24	10.30	-0.06
ϵ Hydræ	8	38	17.87	18.02	-0.15	α Cygni	20	35	58.65	58.80	-0.15
ι Ursæ Maj.	8	48	13.15	13.26	-0.11	61 Cygni (1st)	20	59	43.74	43.87	-0.13
α Hydræ	9	19	43.40	43.57	-0.17	ζ Cygni	21	6	7.70	7.83	-0.13
θ Ursæ Maj.	9	22	6.95	7.12	-0.17	β Aquarii	21	23	7.81	7.92	-0.11
ϵ Leonis	9	36	45.42	45.53	-0.11	ϵ Pegasi	21	36	19.60	19.72	-0.12
Regulus	9	59	50.67	50.80	-0.13	α Aquarii	21	57	33.76	33.86	-0.10
α Ursæ Maj.	10	53	47.85	47.84	+0.01	ζ Pegasi	22	33	28.97	29.00	-0.03
δ Leonis	11	5	35.35	35.42	-0.07	Fomalhaut	22	48	47.62	47.61	+0.01
δ Crateris	11	11	20.66	20.90	-0.24	α Pegasi	22	56	47.64	47.75	-0.11
β Leonis	11	40	53.59	53.70	-0.11	ι Piscium	23	31	43.31	43.27	+0.04
γ Ursæ Maj.	11	45	23.00	23.07	-0.07						

An inspection of the results of this table, and a comparison with the table of excesses of the Greenwich above the Oxford Catalogues for 1845 and 1860, will shew that it gives a satisfactory explanation of those excesses. The differences between the Nautical Almanac and the Greenwich Catalogue are on the whole larger, but there is the same relative diminution near the vernal equinox, and a general similarity which leaves no doubt of the origin of the discrepancies in the Radcliffe Catalogue. I have therefore thought it desirable to reduce all the results to the Greenwich equinox, by the application of the differences given under the different hours of Right Ascension as obtained by comparison with the Greenwich Catalogue for 1860.

Column 6 gives the mean of the epochs of observation in R.A. for the different years, and is formed by taking the means (with due regard to the number of observations) of the year and fraction of the year given for each star in the special catalogue for each year.

Columns 7 and 8 give the geometrical precessions and secular variations in R.A., and are those which would be found by the use of Peters' values of the constants. For precession, the formula for computation is, for epoch 1860,

$$\begin{aligned} & 3^{\text{s}}.0720 + 1^{\text{s}}.3370 \times \text{Sin. R.A. Cot. N.P.D.} \\ & = 3^{\text{s}}.0720 + 1^{\text{s}}.3370 \times \text{Sin. } \alpha \text{ Cot. } \Delta \text{ (with the ordinary notation.)} \end{aligned}$$

In practice I have avoided unnecessary labour in the computation of the precessions, first, by taking the precessions (and secular variations likewise) from the Greenwich Catalogue for all stars found in that Catalogue; and secondly, by taking them, with suitable corrections, from the Catalogue of the British Association, for all stars not near the pole. For stars not found in either of these, the precessions and secular variations have been computed by myself.

The constants m and n (used in the B.A.C.) are those of Bessel, and, in my paper on Proper Motions (*Memoirs of the Royal Astronomical Society*, vol. xix.), there will be found formulæ for reducing to those of Peters.

The following table will give the corrections necessary to be applied to the precessions of the B.A.C.

Value of Precession in R.A.	Correction.	Value of Precession in R.A.	Correction.	Value of Precession in R.A.	Correction.
s.	s.	s.	s.	s.	s.
2'0	+ 0'0011	3'0	+ 0'0012	4'0	+ 0'0012
'1	11	'1	12	'1	12
'2	11	'2	12	'2	12
'3	11	'3	12	'3	12
'4	11	'4	12	'4	13
'5	11	'5	12	'5	13
'6	11	'6	12	'6	13
'7	11	'7	12	'7	13
'8	11	'8	12	'8	13
'9	12	'9	12	'9	13
3'0	+ 0'0012	4'0	+ 0'0012	5'0	+ 0'0013

It therefore appears that for all stars not near the pole it is sufficient to apply the correction $+0'001$ to the precessions in R.A. of the B.A.C. to reduce to Peters. The precessions in N.P.D. need no correction.

By applying then the secular variations of precession, the B.A.C. may be used for all stars not very near the pole contained in that work.

The secular variation (independently of the variations of m and n) in R.A. has been computed where necessary from the following formula (p and p' being the precessions in R.A. and N.P.D.)

$$\text{Sec. var. in R.A.} = -0^s.0004848 \times pp' \cot \Delta + 0^s.0000323 \times p'^2 \tan \alpha \operatorname{Cosec}^2 \Delta;$$

and, for the terms dependent on the variations of m and n , by a process which is sufficiently obvious, from the formula

$$+ 0^s.00321 - 0^s.000429 \times p.$$

The latter formula, for convenience of use, I have tabulated, and I print it in this place because it may be useful to other astronomers.

*Table of Secular Variations in R.A. depending on the variations of m and n,
for the Epoch 1860.*

<i>p</i>	Secular Variation.	<i>p</i>	Secular Variation.	<i>p</i>	Secular Variation.	<i>p</i>	Secular Variation.
s.	s.	s.	s.	s.	s.	s.	s.
-42°0	+0°0212	-19°0	+0°0114	+ 2°5	+0°0021	+16°0	-0°0037
41°0	208	18°0	109	3°0	19	17°0	41
40°0	204	17°0	105	3°5	17	18°0	45
39°0	199	16°0	101	4°0	15	19°0	50
38°0	195	15°0	96	4°5	13	20°0	54
37°0	191	14°0	92	5°0	11	21°0	58
36°0	186	13°0	88	5°5	9	22°0	62
35°0	182	12°0	83	6°0	6	23°0	67
34°0	178	11°0	79	6°5	4	24°0	71
33°0	173	10°0	75	7°0	+0°0002	25°0	75
32°0	169	9°0	71	7°5	0°0000	26°0	80
31°0	165	8°0	67	8°0	-0°0002	27°0	84
30°0	161	7°0	62	8°5	4	28°0	88
29°0	156	6°0	58	9°0	7	29°0	92
28°0	152	5°0	54	9°5	9	30°0	97
27°0	148	4°0	49	10°0	11	31°0	101
26°0	144	3°0	45	10°5	13	32°0	105
25°0	139	2°0	41	11°0	15	33°0	110
24°0	135	- 1°0	37	12°0	19	34°0	114
23°0	131	0°0	32	13°0	24	+35°0	-0°0118
22°0	126	+ 1°0	28	14°0	28		
21°0	122	2°0	24	15°0	32		
-20°0	+0°0118	+ 2°5	+0°0021	+16°0	-0°0037		

Column 10 contains the Proper Motion in R.A. of all stars which are given in my papers and that of Mr. Stone on *Proper Motions of the Stars*, as has been before stated, together with a few other conspicuous proper motions which admit of no doubt. The latter are included in brackets.

Column 11 gives the concluded North Polar Distances of all the stars observed, the means of the results for the different years being taken as in the case of Right Ascension. It may be mentioned that Mr. Johnson had compiled a catalogue from the results of 1854, 1855, and 1856, and included in it vol. xvii for 1856 of the *Radcliffe*

Observations. As the reductions appeared to have been made with great care, this Catalogue has been used instead of the partial catalogues for the years 1854, 1855, and 1856, and the N.P.D.'s are affected with a correction for the discordance of direct and reflexion results deduced by Mr. Johnson in the fifteenth volume of the *Observations*. The observations for 1868 were finally discussed under my own superintendence, and the same corrections are applied, but it was not observed till a portion of the present Catalogue (to $9\frac{1}{2}^{\text{h}}$ R.A. nearly) had been printed, that, in the results for N.P.D. for the year 1867, the correction was not applied. The corrections necessary to be applied in consequence of this error will be found at the end of the Introduction.

As the North Polar Distances of the Radcliffe Observations observed with Jones's Meridian Circle have been discussed by foreign astronomers and have been found to exhibit a law of errors which deserves investigation, I have thought it worth while to make an elaborate comparison with the Greenwich Catalogue for 1860. This has been a very laborious undertaking, as it was necessary to arrange the stars common to the two Catalogues (very nearly 600 in number) in order of North Polar Distance. The results have, however, proved to be sufficiently valuable and interesting to warrant the time and labour bestowed upon the work, and I will proceed to give an abstract of them.

The means of the excesses of the Greenwich North Polar Distances above the Oxford will be found in the following table, the stars having first been arranged in order of Polar Distance, and divided into groups varying from 5° to 8° in breadth.

No. of Group.	Limiting North Polar Distances of Group.		Mean N.P.D. of Group.	Excess of Greenwich N.P.D.	Smaller Number of Obs.
	° /	° /	° /	"	
1	0 58 to	5 2	2 45	— 0.08	113
2	7 44 „	13 1	10 26	— 0.68	48
3	13 55 „	21 11	18 36	— 1.15	108
4	21 47 „	30 2	25 30	— 0.14	139
5	30 8 „	39 48	34 54	— 0.25	127
6	40 6 „	49 35	44 42	+ 0.06	130
7	50 2 „	55 7	52 19	+ 0.55	121
8	55 29 „	59 39	57 33	+ 1.12	114
9	60 20 „	64 51	62 18	+ 1.13	203
10	65 0 „	69 53	67 54	+ 1.35	221
11	70 5 „	74 57	73 20	+ 0.90	168
12	75 4 „	79 58	77 25	+ 0.83	216
13	80 23 „	84 35	82 22	+ 0.33	244
14	85 6 „	89 53	87 3	+ 0.20	233
15	90 3 „	94 57	92 17	— 0.36	208
16	95 3 „	99 59	97 49	— 0.33	161
17	100 6 „	105 45	103 16	— 0.81	158
18	106 7 „	110 6	107 39	— 0.34	179
19	110 24 „	115 30	113 45	+ 0.32	178
20	115 46 „	120 25	118 5	+ 0.09	190
Sum					3259

The number of stars employed in the formation of the table above was 589, and the number of observations (common to the two Catalogues) as seen in the total is 3259.

The periodicity of the errors (assuming the difference between the Greenwich and Oxford results to be due to errors in the latter) is very obvious, but, before discussing it, it is necessary to bear in mind that different refraction-constants have been used at the two Observatories. At Greenwich Bessel's constant, used in the *Tabulæ Regiomontanæ*, is employed, while at Oxford this constant has been reduced in the ratio of 1 : 0.9967, or is nearly that of the *Fundamenta*.

I will therefore discuss the errors on two suppositions, namely, first, as they stand, or as obtained by the use of the diminished constant; and secondly, as they would stand if Bessel's constant had been used undiminished.

Now a single glance at the table exhibiting the errors will shew

that they follow a very simple law, and they could be represented by a formula of this shape,

$$a + b \sin 4 \text{ N.P.D.}$$

For example, the errors vanish after passing from positive to negative near the pole, and again between the 14th and 15th group, or at an interval of 90° ; and the maximum negative is attained when the N.P.D. is about 18° and the maximum positive when it is about 65° , or at an interval of nearly 45° .

Assuming then this law, the following table will give the elements for the solution of the equations for determining the constants a and b , on the two suppositions which have been named, weights being assigned very nearly in proportion to the number of observations.

No. of Group.	Excess of Greenwich uncorrected for Refraction.	Correction for Refraction.	Excess corrected.	Weight.	4 N.P.D.	Nat. Sine.	Coefficient of a multiplied by Weight.	Coefft. of b multiplied by Weight.	Uncorrected Excess multiplied by Weight.	Corrected Excess multiplied by Weight.
	"	"	"		° ' "				"	"
1	-0.08	+0.13	+0.05	2	11 0	+0.191	+0.382	2	-0.16	+0.10
2	-0.68	+0.10	-0.58	1	41 44	.666	0.666	1	-0.68	-0.58
3	-1.15	+0.07	-1.08	2	74 24	.963	1.926	2	-2.30	-2.16
4	-0.14	+0.05	-0.09	2	102 0	.978	1.956	2	-0.28	-0.18
5	-0.25	+0.01	-0.24	2	139 36	.648	1.296	2	-0.50	-0.48
6	+0.06	-0.03	+0.03	2	178 48	+ .021	+0.042	2	+0.12	+0.06
7	+0.55	-0.05	+0.50	2	209 16	- .489	-0.978	2	+1.10	+1.00
8	+1.12	-0.07	+1.05	2	230 12	.768	1.536	2	+2.24	+2.10
9	+1.13	-0.09	+1.04	4	249 12	0.935	3.740	4	+4.52	+4.16
10	+1.35	-0.11	+1.24	4	271 36	1.000	4.000	4	+5.40	+4.96
11	+0.90	-0.13	+0.77	3	293 20	0.918	2.754	3	+2.70	+2.31
12	+0.83	-0.15	+0.68	4	309 40	.770	3.080	4	+3.32	+2.72
13	+0.33	-0.19	+0.14	5	329 28	.508	2.540	5	+1.65	+0.70
14	+0.20	-0.21	-0.01	5	348 12	- .204	-1.020	5	+1.00	-0.05
15	-0.36	-0.27	-0.63	4	9 8	+ .159	+0.636	4	-1.44	-2.52
16	-0.33	-0.32	-0.65	3	31 16	.519	1.557	3	-0.99	-1.95
17	-0.81	-0.41	-1.22	3	53 4	.799	2.397	3	-2.43	-3.66
18	-0.34	-0.51	-0.85	4	70 36	.943	3.772	4	-1.36	-3.40
19	+0.32	-0.73	-0.41	4	95 0	.996	3.984	4	+1.28	-1.64
20	+0.09	-1.03	-0.94	4	112 20	+ .925	+3.700	4	+0.36	-3.76

By changing the signs of the coefficients of a and b , so as to make the sum of them separately the greatest possible, and adding, we get the following final equations, (the last two groups being neglected

because the presumed uncertainty of the refraction-constant would exercise too great an influence in an investigation intended to determine the law of instrumental errors only).

I. Without regard to difference of refraction

$$\begin{aligned} -5.018 a + 54b &= +11''.91 \\ \text{and } +34.278 a - 4b &= -31''.95. \end{aligned}$$

II. With regard to difference of refraction

$$\begin{aligned} -5.018 a + 54b &= +3''.13 \\ +34.278 a - 4b &= -32''.67. \end{aligned}$$

On the first supposition, we get

$$a = -0''.92; b = +0''.13,$$

and, on the second

$$a = -0''.96; b = -0''.03.$$

On the first supposition therefore, the correction to the observations necessary to harmonize them with the Greenwich Catalogue, is

$$-0''.92 \text{ Sine } 4\Delta + 0''.13,$$

and on the second,

$$-0''.96 \text{ Sine } 4\Delta - 0''.03,$$

shewing that the difference of refractions employed does not greatly alter the result up to 108° N.P.D.

The residual errors, after subtracting the quantities derived from the above formulæ for the different groups, are represented in the following table.

No. of Group.	Residual Errors on		No. of Group.	Residual Errors on	
	First Supposition.	Second Supposition.		First Supposition.	Second Supposition.
	"	"		"	"
1	-0.03	+0.28	11	-0.07	-0.08
2	-0.20	+0.11	12	-0.01	-0.03
3	-0.39	-0.11	13	-0.27	-0.31
4	+0.63	+0.90	14	-0.12	-0.17
5	+0.22	+0.43	15	-0.34	-0.44
6	-0.06	+0.08	16	+0.02	-0.11
7	-0.03	+0.07	17	-0.20	-0.40
8	+0.29	+0.36	18	+0.40	+0.10
9	+0.14	+0.17	19	+1.11	+0.60
10	+0.30	+0.31	20	+0.81	0.00

There is little doubt therefore that the first supposition (that is, the employment of different refraction-constants) satisfies the equations

better, on the whole, than the second, excepting in the last three series, and that, as far as N.P.D. 108° , we have generally a close and satisfactory agreement with the Greenwich Catalogue after the application of the correction. I have therefore tabulated it, but, as it is purely empirical, I have not applied it to the results.

It seems most probably to have its origin in uncorrected errors of graduation of the circle.

Tabulation of the Correction $-0''.92 \sin (4 \text{ N.P.D.}) + 0''.13$.

N.P.D. (Δ .)	4 Δ .	Sine 4 Δ .	Values of Corr ⁿ .	N.P.D. (Δ .)	4 Δ .	Sine 4 Δ .	Values of Corr ⁿ .
0	0		"	0	0		"
5	20	+ .342	+ 0.13	65	260	- 0.985	+ 1.04
10	40	+ .643	- 0.19	70	280	- .985	+ 1.04
15	60	+ .866	- 0.46	75	300	- .866	+ 0.93
20	80	+ .985	- 0.67	80	320	- .643	+ 0.72
25	100	+ .985	- 0.78	85	340	- .342	+ 0.44
30	120	+ .866	- 0.78	90	0	.000	+ 0.13
35	140	+ .643	- 0.67	95	20	+ .342	- 0.19
40	160	+ .342	- 0.46	100	40	+ .643	- 0.46
45	180	.000	- 0.19	105	60	+ .866	- 0.67
50	200	- .342	+ 0.13	110	80	+ .985	- 0.78
55	220	- .643	+ 0.44	115	100	+ .985	- 0.78
60	240	- 0.866	+ 0.72	120	120	+ 0.866	- 0.67

The only columns in addition which require any explanation are the 14th and 15th; containing the precessions in N.P.D. and secular variations of precession.

With regard to the precessions, since Bessel's value of n (used in the B.A.C.) is $-20''.0538$, and that of Peters is $20''.0556$, the precessions in the B.A.C. (when reduced to 1860) may be used without scruple, and, as they are a function of the right ascension only, they may be readily interpolated for stars not found in that work.

The expression for the secular variation of precession (independently of the variation of n) is

$$+ 0.14585 \times p \sin \text{R.A. (where the constant is } 100 \times 15 n \sin 1'').$$

The part depending on the variation of n is represented by

$$- \delta n \cos \text{R.A.} = + 0.00863 \cos \text{R.A.};$$

and the following table will make its application easy.

Secular Variation of N.P.D. depending on the Variation of n .

Limits of R.A.		Value.	Limits of R.A.		Value.
h. m. s.	h. m. s.	"	h. m. s.	h. m. s.	"
0 0 0 to	0 39 51	+ 0'009	12 39 51 to	13 58 33	- 0'008
0 39 51 „	1 58 33	8	13 58 33 „	14 44 31	7
1 58 33 „	2 44 31	7	14 44 31 „	15 21 36	6
2 44 31 „	3 21 36	6	15 21 36 „	15 54 17	5
3 21 36 „	3 54 17	5	15 54 17 „	16 24 15	4
3 54 17 „	4 24 15	4	16 24 15 „	16 52 45	3
4 24 15 „	4 52 45	3	16 52 45 „	17 19 58	2
4 52 45 „	5 19 58	2	17 19 58 „	17 46 40	- 0'001
5 19 58 „	5 46 40	+ 0'001	17 46 40 „	18 13 20	'000
5 46 40 „	6 13 20	'000	18 13 20 „	18 40 2	+ 0'001
6 13 20 „	6 40 2	- 0'001	18 40 2 „	19 7 15	2
6 40 2 „	7 7 15	2	19 7 15 „	19 35 45	3
7 7 15 „	7 35 45	3	19 35 45 „	20 5 43	4
7 35 45 „	8 5 43	4	20 5 43 „	20 38 24	5
8 5 43 „	8 38 24	5	20 38 24 „	21 15 29	6
8 38 24 „	9 15 29	6	21 15 29 „	22 1 27	7
9 15 29 „	10 1 27	7	22 1 27 „	23 20 9	8
10 1 27 „	11 20 9	8	23 20 9 „	0 0 0	+ 0'009
11 20 9 „	12 39 51	- 0'009			

I may mention that all the secular variations which it was found necessary to compute—for stars, namely, not at a great distance from the pole and for stars not in the B.A.C, about 550 in number—were computed by myself, and that the transcription of the Catalogue for press was performed by myself. The general compilation of the Catalogue and the combination of the observations were performed by Mr. Luff with his usual skill and zeal. The whole work has been one of great labour, and I trust that the Catalogue will be acceptable to astronomers, and not be considered inferior to its larger predecessor in accuracy and general usefulness.

ROBERT MAIN.

RADCLIFFE OBSERVATORY, OXFORD,
1870, January 12.

ADDENDUM TO THE INTRODUCTION.

Corrections to be applied to the North Polar Distances of certain Stars between 0^h and 9^h 30^s of Right Ascension, for omission of the R—D correction to the Observations of 1857.

Star's Name.	Cor- rection.	Star's Name.	Cor- rection.	Star's Name.	Cor- rection.
	"		"		"
β Cassiopeiæ	+ 0.3	Bradley 112	+ 0.2	Radcliffe 690	+ 0.2
87 Pegasi	+ 0.6	77 Piscium (1st) ...	+ 0.2	O. A. (N.Z.) 2740 ...	+ 0.3
6 Ceti	+ 0.3	77 Piscium (2nd) ...	+ 0.2	66 Andromedæ ...	+ 0.2
Piazzi O. 25	+ 0.3	η Ceti	+ 0.3	Piazzi ii. 83	+ 0.3
Piazzi O. 26	+ 0.3	32 Ceti	+ 0.5	11 Trianguli	+ 0.3
θ Andromedæ	+ 0.7	40 Ceti	+ 0.3	27 Arietis	+ 0.2
ι Ceti	+ 0.5	Piazzi i. 44	+ 0.2	Piazzi ii. 118	+ 0.3
42 Piscium	+ 0.2	Piazzi i. 57	+ 0.2	ν Arietis	+ 0.4
Piazzi O. 60	+ 0.3	ω Andromedæ	+ 0.2	Piazzi ii. 140	+ 0.3
45 Piscium	+ 0.2	η Piscium	+ 0.2	ϵ Ceti	+ 0.3
Bradley 30	+ 0.3	Piazzi i. 101	+ 0.5	84 Ceti	+ 0.5
11 Ceti	+ 0.2	50 Andromedæ ...	+ 0.3	Bradley 379	+ 0.5
Piazzi O. 88	+ 0.4	51 Andromedæ ...	+ 0.4	μ Arietis	+ 0.3
Piazzi O. 107	+ 0.3	π Piscium	+ 0.4	Lacaille 850	+ 0.4
Piazzi O. 113 (1st) .	+ 0.2	Piazzi i. 131	+ 0.5	39 Arietis	+ 0.5
13 Ceti	+ 0.3	Bradley 222	+ 0.5	* { R.A. 2 ^h 40 ^m 4 ^s ... } { N.P.D. 75° 47' ... }	+ 0.4
Piazzi O. 131	+ 0.6	107 Piscium	+ 0.2	41 Arietis	+ 0.2
ϵ Andromedæ	+ 0.5	Piazzi i. 166	+ 0.2	16 Persei	+ 0.4
Piazzi O. 137	+ 0.3	Lalande 3259	+ 0.8	τ^2 Eridani	+ 0.9
32 Andromedæ	+ 0.2	Lalande 3405	+ 0.4	Piazzi ii. 203	+ 0.9
Piazzi O. 148	+ 0.2	Lalande 3484	+ 0.8	Bradley 416	+ 0.5
ϕ Ceti	+ 0.6	ι Arietis	+ 0.3	49 Arietis	+ 0.8
Piazzi O. 189	+ 0.3	Bradley 279	+ 0.6	51 Arietis	+ 0.2
δ Piscium	+ 0.3	Lalande 3825	+ 0.4	ρ^2 Eridani	+ 0.3
ϕ^2 Ceti	+ 0.5	16 Arietis	+ 0.3	β Persei	+ 0.2
ν^1 Cassiopeiæ	+ 0.4	66 Ceti (2nd)	+ 0.9	κ Persei	+ 0.2
36 Andromedæ ...	+ 0.2	* { R.A. 2 ^h 6 ^m 7 ^s ... } { N.P.D. 34° 39' ... }	+ 0.5	Piazzi ii. 261	+ 0.3
Piazzi O. 246	+ 0.4	20 Arietis	+ 0.2	δ Arietis	+ 0.4
70 Piscium	+ 0.6	θ Arietis	+ 0.3	94 Ceti	+ 0.4
ϵ Piscium	+ 0.3				

Star's Name.	Cor- rection.	Star's Name.	Cor- rection.	Star's Name.	Cor- rection.
	"		"		"
ζ Arietis	+ 0.3	Piazzi iv. 22.....	+ 0.3	9 Aurigæ	+ 0.3
ζ Eridani	+ 0.9	φ Tauri	+ 0.3	ε Leporis	+ 0.3
14 Eridani	+ 0.2	h Tauri.....	+ 0.3	13 Orionis	+ 0.3
95 Ceti.....	+ 0.4	Bradley 587.....	+ 0.3	h Orionis	+ 0.7
Piazzi iii. 28	+ 0.4	60 Tauri	+ 0.3	λ Eridani.....	+ 0.5
α Persei	+ 0.3	Bradley 592... ..	+ 0.6	μ Leporis.....	+ 0.2
Bradley 475.....	+ 0.5	63 Tauri	+ 0.3	16 Aurigæ	+ 0.2
o Tauri.....	+ 0.9	δ ² Tauri	+ 0.3	λ Aurigæ	+ 0.2
Piazzi iii. 56.....	+ 0.3	W.B. (1) IV. 329...	+ 0.9	τ Orionis	+ 0.5
66 Arietis.....	+ 0.2	κ ² Tauri	+ 0.8	Piazzi v. 61	+ 0.4
f Tauri.....	+ 0.9	ν ¹ Tauri	+ 0.3	Bradley 757.....	+ 0.2
Piazzi iii. 74.....	+ 0.3	76 Tauri	+ 0.3	p Orionis	+ 0.2
t Tauri.....	+ 0.3	Piazzi iv. 96.....	+ 0.3	Bradley 772.....	+ 0.3
Piazzi iii. 87.....	+ 0.2	81 Tauri	+ 0.2	ψ ² Orionis	+ 0.6
Bradley 496.....	+ 0.6	83 Tauri	+ 0.2	Piazzi v. 102	+ 0.6
Piazzi iii. 104	+ 0.2	m ² Persei.....	+ 0.3	α Leporis.....	+ 0.3
δ Persei	+ 0.2	45 Eridani	+ 0.5	21 Camelopardali...	+ 0.2
γ Camelopardali ...	+ 0.2	Piazzi iv. 111	+ 0.5	θ ¹ Orionis (3rd) ...	+ 0.2
17 Tauri	+ 0.2	Piazzi iv. 119	+ 0.3	φ ² Orionis	+ 0.2
18 Tauri	+ 0.8	ν ⁶ Eridani	+ 0.2	26 Aurigæ (2nd) ...	+ 0.4
19 Tauri	+ 0.8	89 Tauri	+ 0.2	ζ Orionis	+ 0.3
24 Tauri	+ 0.3	c ¹ Tauri	+ 0.2	Bradley 818.....	+ 0.3
τ ⁶ Eridani	+ 0.3	σ ² Tauri	+ 0.2	Bradley 824.....	+ 0.3
Piazzi iii. 170	+ 0.4	Bradley 650.....	+ 0.4	128 Tauri (R)	+ 0.3
Bradley 536.....	+ 0.4	τ ¹ Tauri	+ 0.3	Lalande 10912.....	+ 0.3
32 Eridani (1st) ...	+ 0.3	Piazzi iv. 167	+ 0.6	Piazzi v. 237	+ 0.3
Bradley 544.....	+ 0.6	4 Camelopardali ...	+ 0.2	Piazzi v. 239	+ 0.4
γ ¹ Eridani	+ 0.2	μ Eridani.....	+ 0.5	137 Tauri.....	+ 0.6
τ ² Eridani	+ 0.2	Lacaille 1569	+ 0.2	χ ¹ Orionis	+ 0.2
ν Tauri.....	+ 0.5	Piazzi iv. 189	+ 0.9	δ Aurigæ	+ 0.2
41 Tauri	+ 0.8	Piazzi iv. 190	+ 0.3	2 Geminorum	+ 0.2
Piazzi iii. 242	+ 0.3	58 Eridani	+ 0.4	36 Camelopardali...	+ 0.5
Piazzi iii. 251	+ 0.5	π ¹ Orionis	+ 0.2	41 Aurigæ (2nd) ...	+ 0.2
*{R.A. 4 ^h 4 ^m 1 ^s ...}	+ 0.9	Bradley 661.....	+ 0.2	71 Orionis	+ 0.2
*{N.P.D. 77° 4' ...}		ι Aurigæ	+ 0.2	2 Lyncis	+ 0.2
Piazzi iii. 260	+ 0.2	Lacaille 1648	+ 0.2	72 Orionis	+ 0.4
o ¹ Eridani.....	+ 0.2	Piazzi iv. 258	+ 0.9	η Leporis.....	+ 0.2
A Eridani.....	+ 0.7	ε Aurigæ	+ 0.2	59 Orionis	+ 0.3
o ² Eridani.....	+ 0.2	κ Leporis.....	+ 0.4	38 Aurigæ	+ 0.4
ω ² Tauri	+ 0.3	64 Eridani	+ 0.5	χ ³ Orionis	+ 0.2

Star's Name.	Cor- rection.	Star's Name.	Cor- rection.	Star's Name.	Cor- rection.
	"		"		"
1 Geminorum	+ 0.2	ζ Geminorum	+ 0.2	β Cancri	+ 0.3
66 Orionis	+ 0.4	(R) Geminorum ...	+ 0.5	χ Cancri.	+ 0.2
43 Aurigæ	+ 0.3	(R) Canis Minoris .	+ 0.9	Piazzi viii. 42	+ 0.2
Bradley 912.....	+ 0.2	τ Geminorum	+ 0.2	Bradley 1188	+ 0.2
74 Orionis	+ 0.6	18 Lyncis.....	+ 0.2	υ ¹ Cancri (2nd) ...	+ 0.2
45 Aurigæ	+ 0.4	51 Geminorum.....	+ 0.2	Piazzi viii. 72	+ 0.2
μ Geminorum	+ 0.3	52 Geminorum.....	+ 0.3	υ ³ Cancri	+ 0.3
Lalande 12263.....	+ 0.4	Lalande 14038.....	+ 0.6	η Cancri	+ 0.2
Lalande 12274.....	+ 0.5	Lacaille 2771	+ 0.2	δ Cancri	+ 0.2
78 Orionis	+ 0.4	η Canis Majoris ...	+ 0.2	(S) Hydræ	+ 0.9
ν Geminorum	+ 0.3	Piazzi vii. 116	+ 0.5	Piazzi viii. 208.....	+ 0.2
7 Lyncis	+ 0.3	(S) Canis Minoris..	+ 0.2	Piazzi viii. 236.....	+ 0.2
9 Lyncis	+ 0.2	μ Geminorum	+ 0.4	Bradley 1283	+ 0.3
8 Lyncis	+ 0.3	70 Geminorum.....	+ 0.4	τ Ursæ Majoris ...	+ 0.2
51 Aurigæ	+ 0.2	ο Geminorum	+ 0.2	16 Ursæ Majoris ...	+ 0.4
Bradley 968 (1st) ..	+ 0.4	σ Geminorum	+ 0.2	π ¹ Cancri.....	+ 0.3
56 Aurigæ (1st) ...	+ 0.2	9 Puppis	+ 0.3	Bradley 1300	+ 0.4
56 Aurigæ (2nd) ...	+ 0.2	Bradley 1142	+ 0.2	θ Hydræ	+ 0.2
17 Monocerotis ...	+ 0.3	*{R.A. 9 ^h 53 ^m 47 ^s }	+ 0.6	83 Cancri.....	+ 0.2
59 Aurigæ	+ 0.3	{N.P.D. 118° 3' ...}		Bradley 1313	+ 0.2
15 Lyncis.....	+ 0.2	28 Monocerotis ...	+ 0.2	41 Lyncis (2nd) ...	+ 0.4
39 Geminorum.....	+ 0.2	Bradley 1158	+ 0.2	3 Leonis	+ 0.5
ε Canis Majoris ...	+ 0.2	Bradley 1147	+ 0.2	12 Leonis.....	+ 0.2
Piazzi vi. 305	+ 0.4	W.B. (2) VIII. 71-2	+ 0.4	f Leonis	+ 0.3
Lacaille 2573	+ 0.2				

THE SECOND
RADCLIFFE CATALOGUE
OF STARS,

CONTAINING ALL OBSERVED FROM THE YEAR 1854 TO THE YEAR 1861,
BOTH INCLUSIVE;

REDUCED TO THE EPOCH

1860·0.

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
61 40 56.3	59.0	7	— 20.06	+ 0.011	+ 0.15	3215	281	21 Andromedæ, α
11 3 50.1	60.1	5	20.06	0.011	.....	3217	...	Bradley 3217
31 37 21.7	58.8	3	20.06	0.012	+ 0.19	3216	283	11 Cassiopeiæ, β
72 33 58.7	59.2	3	20.06	0.012	.....	3218	284	87 Pegasi
118 46 1.9	59.4	4	20.06	0.012	.....	...	285	Piazzi xxiii. 285
44 42 25.8	61.8	1	20.05	0.015	+ 0.01	3220	288	22 Andromedæ
106 14 13.7	57.1	7	20.05	0.017	+ 0.27	3222	5	6 Ceti
75 35 39.0	56.6	6	20.05	0.021	+ 0.02	1	9	88 Pegasi, γ
4 3 10.4	57.9	4	20.05	0.023	.....	...	...	Radcliffe 28
4 6 24.0	57.3	3	20.05	0.025	.....	...	...	Radcliffe 33
81 57 25.1	61.8	4	20.04	0.024	+ 0.05	5	16	35 Piscium
81 57 35.0	61.8	3	20.04	0.024	.....	...	17	Piazzi O. 17
29 14 41.9	57.6	3	20.04	0.027	.....	...	25	Piazzi O. 25
88 55 42.9	55.9	3	20.04	0.027	.....	...	26	Piazzi O. 26
52 5 44.4	57.9	1	20.04	0.027	+ 0.03	9	28	24 Andromedæ, θ
81 54 20.0	60.0	5	20.04	0.028	.....	10	30	38 Piscium (1st star)
81 54 16.9	61.0	6	20.04	0.028	.....			38 Piscium (2nd star)
74 26 47.4	60.4	4	20.03	0.029	.....	11	32	39 Piscium
92 38	...	...	20.03	0.030	.....	...	...	Lalande 264-5
1 19 53.6	59.9	2	20.03	0.053	.....	...	...	Radcliffe 56
99 36 1.2	59.4	2	20.03	0.033	+ 0.06	14	42	8 Ceti, ι
82 35 16.0	59.6	7	20.02	0.035	— 0.01	16	45	41 Piscium, d
77 17 42.1	56.9	7	20.01	0.038	.....	19	53	42 Piscium
102 59 21.5	58.0	9	20.01	0.038	.....	20	55	9 Ceti
92 59 36.6	56.2	6	20.00	0.042	.....	...	60	Piazzi O. 60
10 43	...	...	19.99	0.051	+ 0.03	24	...	Bradley 24
83 4 59.8	59.9	4	19.99	0.045	+ 0.07	26	65	45 Piscium
83 38 36.8	61.9	2	19.99	0.045	.....	...	...	W.B. (1) O. 304
90 49 33.3	57.9	3	19.98	0.047	+ 0.03	29	70	10 Ceti
95 46 44.5	57.7	5	19.98	0.048	.....	...	72	Piazzi O. 72
87 57 40.4	58.5	3	19.98	0.048	.....	...	73	Piazzi O. 73
74 45 2.1	58.6	3	19.98	0.049	.....	30	...	Bradley 30
72 52 57.6	57.3	4	19.98	0.050	.....	32	76	47 Piscium
91 53 21.2	57.8	5	19.96	0.053	+ 0.05	36	87	11 Ceti
105 38 14.6	59.4	4	— 19.96	+ 0.053	.....	...	88	Piazzi O. 88

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. in N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
0 1 "	1800+		"	"	"			
4 27 18.3	57.8	3	— 19.96	+ 0.076	.....	...	...	Groombridge 67
94 43 54.3	58.9	3	19.96	0.054	+ 0.01	38	89	12 Ceti
4 3 51.2	58.9	2	19.96	0.082	.....	...	...	Radcliffe 104
24 15 16.5	60.1	4	19.96	0.059	0.00	37	90	13 Cassiopeiæ
5 47 6.0	54.9	1	19.95	0.076	.....	...	...	Radcliffe 109
83 49 6.8	61.8	2	19.94	0.058	.....	44	101	51 Piscium (1st star)
83 49 3.1	61.8	2	19.94	0.058	.....			51 Piscium (2nd star)
70 28 36.2	55.5	3	19.94	0.059	.....	45	102	52 Piscium
5 40 48.4	56.9	2	19.93	0.084	.....	...	...	Radcliffe 129
91 22 51.9	58.9	3	19.93	0.060	.....	...	107	Piazzi O. 107
6 5 46.0	58.5	3	19.92	0.086	.....	...	...	Radcliffe 134
80 28 2.1	57.6	3	19.92	0.062	.....	...	110	Piazzi O. 110
95 19 10.6	60.3	5	19.92	0.062	.....	...	113	Piazzi O. 113 (1st star)
95 18 58.9	61.8	2	19.92	0.062	.....	...		Piazzi O. 113 (2nd star)
6 2	...	...	19.91	0.090	.....	...	...	Radcliffe 142
94 21 50.2	58.5	3	19.91	0.063	+ 0.04	50	117	13 Ceti
6 1	...	...	19.91	0.091	.....	...	...	Radcliffe 146
91 16 32.2	59.7	4	19.91	0.064	.....	51	120	Bradley 40
77 33 27.0	61.0	1	19.90	0.066	.....	...	...	B.F. 40
8 16 49.6	58.4	4	19.89	0.088	.....	48	...	Bradley 48
115 32 17.4	56.3	4	19.89	0.065	.....	...	130	Piazzi O. 130
87 37 58.5	57.6	3	19.88	0.067	.....	...	131	Piazzi O. 131
61 26 54.5	57.1	3	19.87	0.071	+ 0.24	56	134	30 Andromedæ, ε
59 54 21.2	58.2	3	19.86	0.072	+ 0.11	57	136	31 Andromedæ, δ
87 38 54.7	58.5	3	19.86	0.070	.....	...	137	Piazzi O. 137
69 30 19.6	58.9	4	19.86	0.072	.....	58	138	54 Piscium
69 19 56.2	61.9	1	19.86	0.073	.....	60	141	55 Piscium (1st star)
69 19 48.5	61.9	3	19.86	0.073	.....			55 Piscium (2nd star)
34 13 52.7	57.7	6	19.86	0.078	+ 0.04	59	139	18 Cassiopeiæ, α
51 18 36.8	55.9	3	19.84	0.077	.....	61	143	32 Andromedæ
95 7 15.5	58.2	3	19.84	0.073	.....	...	146	Piazzi O. 146
66 8 19.9	57.7	4	19.83	0.076	.....	...	148	Piazzi O. 148
94 37 30.3	56.2	5	19.81	0.078	.....	...	157	Piazzi O. 157
108 45 21.9	57.7	5	19.80	0.078	— 0.02	70	159	16 Ceti, β
101 22 22.0	57.6	3	— 19.79	+ 0.080	+ 0.13	71	163	17 Ceti, φ ¹

Second Radcliffe Catalogue of Stars

No.	Mag.	Number of Esti- mations of mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
71	5.9	6	Piazzi O. 162	0 37 19.74	57.1	5	+ 3.371	+ 0.0532	.....
72	7.1	4	Piazzi O. 167	0 37 58.29	57.9	4	3.069	+ 0.0038	.....
73	6.8	4	18 Ceti	0 38 26.82	55.7	2	3.018	— 0.0028	.....
74	7.4	2	Piazzi O. 175	0 38 53	...	...	3.195	+ 0.0224	.....
75	7.4	2	Piazzi O. 176	0 38 56	...	...	3.195	+ 0.0224	.....
76	...	...	58 Piscium	0 39 43.45	61.4	2	3.118	+ 0.0101	0.000
77	...	...	Piazzi O. 181 (1st star)	0 40 4	...	...	3.338	+ 0.0461	.....
78	...	...	Piazzi O. 181 (2nd star)	0 40 4	...	...	3.338	+ 0.0461	.....
79	7.0	3	61 Piscium	0 40 29.70	58.8	3	3.159	+ 0.0155	.....
80	3.8	1	24 Cassiopeiæ, η^1	0 40 39.28	57.5	3	3.436	+ 0.0602	+ 0.132
81	8.4	3	24 Cassiopeiæ, η^2	0 40 40.21	57.5	3	3.436	+ 0.0602	.....
82	6.7	1	62 Piscium	0 41 1.79	61.9	1	3.099	+ 0.0077	.....
83	6.0	3	Piazzi O. 189	0 41 2.39	56.9	2	3.091	+ 0.0065	.....
84	5.0	4	63 Piscium, δ	0 41 25.26	57.9	10	3.101	+ 0.0078	+ 0.003
85	5.8	4	64 Piscium	0 41 37.61	58.2	3	3.142	+ 0.0132	.....
86	6.0	3	Bradley 74	0 42 2.41	57.9	2	5.043	+ 0.5454	+ 0.037
87	7.0	3	65 Piscium, i^1	0 42 22.29	61.9	2	3.197	+ 0.0204	.....
88	7.0	3	65 Piscium, i^2	0 42 22.76	61.8	1	3.197	+ 0.0204	.....
89	6.0*	...	Piazzi O. 198	0 42 23.62	58.4	4	3.009	— 0.0029	.....
90	6.4*	...	Piazzi O. 199	0 42 58.00	57.4	2	3.377	+ 0.0471	.....
91	5.9	2	19 Ceti, ϕ^2	0 43 6.99	57.9	4	3.022	— 0.0013	.....
92	5.2	2	20 Ceti	0 45 51.19	57.6	6	3.063	+ 0.0035	— 0.004
93	6.5	5	Groombridge 144	0 46 29.48	58.4	5	11.993	+ 6.5971	.....
94	...	...	26 Cassiopeiæ, v^1	0 46 43.16	58.8	1	3.508	+ 0.0647	.....
95	6.6	2	21 Ceti	0 47 13.78	58.2	3	3.026	— 0.0001	.....
96	5.9	7	36 Andromedæ	0 47 28.71	59.4	6	3.188	+ 0.0177	.....
97	2.0*	...	27 Cassiopeiæ, γ	0 48 17.33	56.6	3	3.556	+ 0.0707	— 0.008
98	4.3	2	37 Andromedæ, μ ...	0 48 59.62	59.9	5	3.292	+ 0.0303	+ 0.005
99	6.0	2	22 Ceti, ϕ^3	0 49 0.30	59.3	5	3.012	— 0.0013	.....
100	9.3	6	Radcliffe 253	0 50 5.62	55.5	3	12.517	+ 6.7045	.....
101	5.0	1	2 Ursæ Minoris	0 50 16.89	56.5	10	6.769	+ 1.2661	+ 0.065
102	7.5	4	Piazzi O. 246	0 51 3.94	57.5	7	3.104	+ 0.0079	.....
103	8.2	2	Piazzi O. 251 (1st star)	0 52 13	...	...	3.072	+ 0.0046	.....
104	7.1	2	Piazzi O. 251 (2nd star)	0 52 13	...	...	3.072	+ 0.0046	.....
105	9.2	3	Groombridge 175	0 52 21.79	55.9	3	+10.051	+ 3.7202	.....

100 Identical with Redhill 127.

reduced to the Epoch 1860.0.

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
35 32 44.8	57.1	4	— 19.79	+ 0.088	.....	...	162	Piazzi O. 162
90 30 42.2	59.0	4	19.78	0.082	.....	...	167	Piazzi O. 167
103 38 22.7	56.9	4	19.77	0.082	.....	73	172	18 Ceti
59 49 15.7	61.8	2	19.77	0.083	.....	...	175	Piazzi O. 175
59 48 49.0	61.8	2	19.77	0.083	.....	...	176	Piazzi O. 176
78 47 23.3	61.0	1	19.76	0.087	0.00	76	179	58 Piscium
39 19 11.9	61.9	2	19.75	0.089	.....	...	181	Piazzi O. 181 (1st star)
39 19 14.7	61.9	1	19.75	0.089	.....	...		Piazzi O. 181 (2nd star)
69 50 24.3	57.4	4	19.74	0.089	.....	81	186	61 Piscium
32 55 41.4	59.1	6	19.74	0.097	+ 0.49	79	185	24 Cassiopeiæ, η^1
32 55 46.9	61.9	2	19.74	0.097	.....	...	...	24 Cassiopeiæ, η^2
83 27 53.2	60.9	1	19.73	0.088	.....	84	190	62 Piscium
85 26 23.9	58.9	3	19.73	0.089	.....	...	189	Piazzi O. 189
83 10 40.0	57.7	6	19.73	0.090	+ 0.05	85	192	63 Piscium, δ
73 48 58.1	59.8	3	19.72	0.091	.....	86	193	64 Piscium
7 3 14.8	57.3	2	19.72	0.142	+ 0.03	74	...	Bradley 74
63 3 8.7	61.9	3	19.71	0.094	.....	88	195	65 Piscium, i^1
63 3 11.9	61.9	3	19.71	0.094	.....			65 Piscium, i^2
104 19 19.6	56.6	4	19.71	0.089	.....	...	198	Piazzi O. 198
39 15 18.4	56.8	1	19.70	0.099	.....	...	199	Piazzi O. 199
101 23 57.3	58.4	2	19.70	0.090	.....	89	201	19 Ceti, ϕ^2
91 54 17.7	57.7	5	19.66	0.097	+ 0.01	93	213	20 Ceti
1 43 46.8	58.1	4	19.64	0.360	.....	65	177	Groombridge 144
31 47 9.8	57.9	1	19.64	0.111	.....	94	217	26 Cassiopeiæ, v^1
99 29 58.2	56.9	4	19.63	0.098	.....	98	222	21 Ceti
67 7 50.1	59.6	4	19.63	0.104	.....	97	223	36 Andromedæ
30 2 33.0	57.1	3	19.61	0.117	— 0.02	99	225	27 Cassiopeiæ, γ
52 15 39.2	59.6	6	19.60	0.110	— 0.05	101	232	37 Andromedæ, μ
102 1 34.6	61.9	1	19.60	0.101	.....	103	235	22 Ceti, ϕ^3
1 45 32.6	59.8	2	19.58	0.404	.....	...	...	Radcliffe 253
4 29 48.2	57.3	4	19.58	0.223	+ 0.01	92	220	2 Ursæ Minoris
83 54 47.7	57.6	5	19.57	0.108	.....	...	246	Piazzi O. 246
89 58 14.9	61.8	2	19.54	0.105	.....	...	251	Piazzi O. 251 (1st star)
89 58 26.1	61.8	2	19.54	0.105	.....	...		Piazzi O. 251 (2nd star)
2 29 5.3	58.9	1	— 19.54	+ 0.340	.....	...	...	Groombridge 175

Second Radcliffe Catalogue of Stars

No.	Mag.	Number of Esti- mations of mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of R.A. Obs.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
106	6.6	5	Groombridge 195	0 52 26.66	59.6	2	+ 7.978	+ 1.9396	.....
107	8.9	3	*	0 54 19.89	58.9	2	3.602	+ 0.0707	.....
108	8.0	3	70 Piscium	0 54 50.16	57.3	4	3.112	+ 0.0086	- 0.003
109	4.2	2	71 Piscium, ϵ	0 55 40.78	59.3	22	3.112	+ 0.0086	- 0.002
110	6.0	3	25 Ceti	0 55 57.75	56.9	2	3.040	+ 0.0023	.....
111	7.2	4	Bradley 112	0 56 2.00	56.9	4	3.504	+ 0.0551	.....
112	6.3	1	Lacaille 287	0 56 36.43	56.9	1	2.881	- 0.0098	.....
113	9.5	1	26 Ceti (1st star)	0 56 37	...	...	3.076	+ 0.0054	+ 0.006
114	6.0	1	26 Ceti (2nd star)	0 56 37	...	...	3.076	+ 0.0054	.....
115	6.0	2	74 Piscium, ψ^1	0 58 10.92	57.3	2	3.199	+ 0.0169	.....
116	6.2	3	Bradley 122	0 58 11.79	57.3	2	3.199	+ 0.0168	.....
117	6.7	3	77 Piscium (1st star)	0 58 34.95	57.9	1	3.097	+ 0.0073	.....
118	7.5	6	Bradley 125	0 58 37.06	58.4	2	3.097	+ 0.0073	.....
119	5.3*	...	30 Cassiopeiæ, μ	0 58 58.96	54.8	2	3.544	+ 0.0573	+ 0.386
120	5.0*	...	41 Andromedæ	0 59 59.47	56.9	4	3.397	+ 0.0378	.....
121	6.4	3	78 Piscium	1 0 17.04	59.2	3	3.283	+ 0.0249	.....
122	6.0	2	Bradley 117	1 0 19.25	58.8	2	4.849	+ 0.3224	.....
123	6.1	3	79 Piscium, ψ^2	1 0 26.87	57.9	2	3.199	+ 0.0155	.....
124	6.5	2	30 Ceti	1 0 43.90	55.8	1	3.007	+ 0.0001	.....
125	7.1	2	29 Ceti	1 0 46.54	56.9	1	3.080	+ 0.0059	.....
126	5.0*	...	80 Piscium, e	1 1 9.66	55.8	3	3.102	+ 0.0077	- 0.021
127	4.0	1	31 Ceti, η	1 1 32.72	58.5	3	3.003	- 0.0001	.....
128	2.3*	...	43 Andromedæ, β	1 1 54.23	59.2	3	3.321	+ 0.0285	+ 0.015
129	4.6	1	33 Cassiopeiæ, θ	1 2 36.04	58.4	2	3.576	+ 0.0584	+ 0.023
130	5.7	1	32 Cassiopeiæ	1 2 36.50	56.9	1	3.819	+ 0.0932	.....
131	6.2	2	Piazzi O. 311	1 2 46.27	57.9	2	3.168	+ 0.0134	.....
132	6.9	2	32 Ceti	1 3 10.66	59.6	3	3.010	+ 0.0007	.....
133	6.0	2	45 Andromedæ	1 3 18.88	57.9	1	3.346	+ 0.0305	.....
134	6.0	1	33 Ceti	1 3 21.30	57.9	1	3.083	+ 0.0062	.....
135	8.0?	1	Piazzi i. 4	1 3 34.27	57.9	1	3.129	+ 0.0100	.....
136	7.0*	...	Piazzi i. 8	1 4 9.10	57.3	2	3.134	+ 0.0104	.....
137	6.3	1	Bradley 137	1 4 16.30	58.9	1	5.005	+ 0.3434	.....
138	6.3	1	Piazzi i. 9	1 4 28.44	55.9	2	3.438	+ 0.0402	.....
139	8.5	7	Radcliffe 361	1 4 46.31	56.1	7	8.679	+ 2.0092	.....
140	6.8	3	Bradley 153	1 5 17.38	57.9	2	+ 3.283	+ 0.0238	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion. in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
0 1 "	1800+		"	"	"			
3 36 10.8	57.5	5	— 19.52	+ 0.277	.....	...	...	Groombridge 195
30 37 41.8	62.0	1	19.50	0.131	.....	...	...	*
82 48 54.1	57.6	3	19.49	0.116	.....	110	260	70 Piscium
82 51 51.9	58.0	10	19.47	0.118	0.00	113	264	71 Piscium, ϵ
95 35 10.3	60.1	4	19.46	0.115	.....	115	266	25 Ceti
36 32 45.8	57.9	3	19.46	0.132	.....	112	...	Bradley 112
120 16 41.9	58.9	2	19.45	0.111	.....	...	...	Lacaille 287
89 23 11.9	61.8	1	19.45	0.118	+ 0.07	...	...	26 Ceti (1st star)
89 23 6.2	61.8	1	19.45	0.118	.....	116	270	26 Ceti (2nd star)
69 16 39.0	57.7	5	19.41	0.125	.....	121	275	74 Piscium, ψ^1
69 17 6.0	58.9	4	19.41	0.125	.....	122	276	Bradley 122
85 50 16.0	59.7	5	19.41	0.122	.....	124	280	77 Piscium (1st star)
85 50 11.6	60.6	4	19.41	0.122	.....	125	281	Bradley 125
35 46 5.6	55.5	4	19.40	0.140	+ 1.56	118	277	30 Cassiopeiae, μ
46 48 17.4	59.2	2	19.37	0.137	.....	129	290	41 Andromedæ
58 44 11.1	62.0	1	19.37	0.133	.....	131	291	78 Piscium
11 4 23.9	57.0	2	19.37	0.192	.....	117	283	Bradley 117
70 0 23.7	58.9	1	19.36	0.130	.....	132	292	79 Piscium, ψ^2
100 32 9.8	60.0	2	19.36	0.123	.....	135	296	30 Ceti
88 44 22.1	56.9	1	19.36	0.126	.....	133	295	29 Ceti
85 5 30.2	55.6	3	19.35	0.127	+ 0.19	136	299	80 Piscium, e
100 55 32.1	57.9	3	19.34	0.124	.....	141	300	31 Ceti, η
55 7 21.7	54.9	6	19.33	0.138	+ 0.09	140	301	43 Andromedæ, β
35 35 46.2	57.9	2	19.31	0.149	+ 0.02	142	307	33 Cassiopeiae, θ
25 43 37.1	57.4	3	19.31	0.158	.....	139	305	32 Cassiopeiae
75 4 20.4	59.2	3	19.31	0.133	.....	...	311	Piazzi O. 311
99 39 6.7	59.9	2	19.30	0.128	.....	147	2	32 Ceti
53 1 18.5	60.4	2	19.30	0.142	.....	145	313	45 Andromedæ
88 18	...	...	19.30	0.131	.....	148	3	33 Ceti
81 12	...	...	19.29	0.133	.....	...	4	Piazzi i. 4
80 27 13.6	57.9	2	19.28	0.134	.....	...	8	Piazzi i. 8
10 50 10.2	62.0	1	19.27	0.210	.....	137	309	Bradley 137
45 24 30.6	57.6	3	19.27	0.148	.....	...	9	Piazzi i. 9
3 48 14.0	55.9	1	19.26	0.361	.....	...	...	Radcliffe 361
60 40 45.0	59.5	2	— 19.25	+ 0.142	.....	153	11	Bradley 153

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
141	6.8	2	35 Ceti	1 5 20.03	57.9	3	+ 3.084	+ 0.0063	.....
142	5.8	3	86 Piscium, ζ^1	1 6 25.22	58.9	4	3.118	+ 0.0090	+ 0.008
143	6.6	5	Piscium, ζ^2	1 6 26.69	58.4	4	3.118	+ 0.0090	+ 0.007
144	9.0	1	37 Ceti (1st star)	1 7 20	...	...	3.013	+ 0.0014	+ 0.004
145	5.7	4	37 Ceti (2nd star) ...	1 7 20.86	56.7	4	3.013	+ 0.0014	.....
146	8.9	4	1 Ursæ Min. (1st star)	1 7 34.19	60.2	9	18.515	+12.5528	.....
147	6.2	2	38 Ceti	1 7 40.46	57.3	2	3.060	+ 0.0047	- 0.006
148	2.0*	...	1 Ursæ Minoris, α ...	1 8 2.37	59.0	14	18.667	+12.6987	+ 0.065
149	8.1	3	Radcliffe 373	1 8 11.01	55.3	3	13.419	+ 5.8365	.....
150	6.6	3	Bradley 155	1 8 46.84	57.9	2	4.761	+ 0.2609	.....
151	5.7	1	39 Ceti	1 9 29.98	60.9	2	3.050	+ 0.0041	.....
152	6.2	1	40 Ceti	1 9 48.95	57.8	3	3.051	+ 0.0042	+ 0.014
153	6.0	2	Bradley 166	1 11 35	...	...	5.003	+ 0.3064	.....
154	8.5	1	35 Cassiopeiæ (1st star)	1 11 46	...	...	3.914	+ 0.0952	.....
155	6.8	2.5	35 Cassiopeiæ (2nd star)	1 11 46.47	57.4	2	3.914	+ 0.0952	.....
156	7.6	6	Piazzi i. 44	1 12 9.60	55.7	5	3.091	+ 0.0070	.....
157	...	...	42 Ceti	1 12 39	...	...	3.062	+ 0.0052	0.000
158	9.5	1	W. B. (1) I. 229	1 15 4.44	57.9	1	3.093	+ 0.0073	.....
159	6.9	3	Piazzi i. 57	1 15 24.59	54.8	3	3.080	+ 0.0065	.....
160	7.7	3	Piazzi i. 60	1 15 37.80	59.2	3	3.123	+ 0.0093	.....
161	6.0	2	47 Andromedæ	1 15 40.75	54.9	2	3.398	+ 0.0315	.....
162	5.0	1	36 Cassiopeiæ, ψ	1 16 5.47	57.9	1	4.119	+ 0.1195	+ 0.005
163	3.0*	...	37 Cassiopeiæ, δ	1 16 41.13	55.8	2	3.818	+ 0.0770	+ 0.042
164	6.9	2	Piazzi i. 68	1 16 54.51	56.9	1	2.866	- 0.0054	.....
165	3.0*	...	45 Ceti, θ	1 17 1.56	58.4	11	3.003	+ 0.0018	- 0.007
166	7.7	1	Groombridge 307	1 17 55.54	58.9	1	4.678	+ 0.2062	.....
167	5.1	1	48 Andromedæ, ω ...	1 19 17.71	55.7	5	3.520	+ 0.0417	+ 0.031
168	7.1	5.5	95 Piscium	1 20 23.82	58.4	4	3.109	+ 0.0085	.....
169	5.8	5	38 Cassiopeiæ, A	1 20 52.24	57.7	5	4.311	+ 0.1413	+ 0.027
170	...	...	Bradley 193	1 22 14.57	57.3	2	4.314	+ 0.1394	.....
171	6.6	1	Piazzi i. 88	1 22 18.94	57.9	2	4.217	+ 0.1246	.....
172	5.0*	...	98 Piscium, μ	1 22 51.24	56.7	4	3.117	+ 0.0094	+ 0.019
173	9.2	2	*	1 23 16	...	...	3.091	+ 0.0073	.....
174	6.4	2	Piazzi i. 99	1 23 47.01	57.9	2	2.829	- 0.0056	.....
175	3.9	1	99 Piscium, η	1 23 59.74	59.5	20	+ 3.197	+ 0.0141	0.000

149. Identical with Redhill 183.

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
0 ' "	1800+		"	"	"			
88 16 8.2	57.9	2	- 19.25	+ 0.134	.....	154	13	35 Ceti
83 9 58.1	60.1	5	19.22	0.138	+ 0.07	158	16	86 Piscium, ζ^1
83 9 47.6	61.6	3	19.22	0.138	+ 0.07	159	17	Piscium, ζ^2
98 39 53.7	61.8	1	19.20	0.135	- 0.27	...	...	37 Ceti (1st star)
98 40 36.1	58.1	3	19.20	0.135	.....	164	24	37 Ceti (2nd star)
1 26 30.9	61.9	2	19.19	0.793	.....	...	...	1 Ursæ Min. (1st star)
91 43 26.4	56.4	4	19.19	0.138	- 0.21	165	25	38 Ceti
1 26 13.1	60.3	17	19.18	0.805	0.00	102	263	1 Ursæ Minoris, α
2 10 9.1	57.9	1	19.18	0.582	.....	...	...	Radcliffe 373
13 10 18.9	57.0	3	19.16	0.213	.....	155	...	Bradley 155
93 14 21.5	58.9	1	19.14	0.141	.....	167	32	39 Ceti
93 0 49.6	58.8	3	19.14	0.142	+ 0.14	168	33	40 Ceti
12 0 34.0	57.9	4	19.08	0.232	.....	166	...	Bradley 166
26 3 50.5	62.0	1	19.08	0.184	.....	...	...	35 Cassiopeiæ (1st star)
26 4 39.5	58.3	6	19.08	0.184	.....	170	40	35 Cassiopeiæ (2nd star)
87 26 50.7	55.9	5	19.07	0.148	.....	...	44	Piazzi i. 44
91 14 45.2	61.9	...	19.06	0.147	+ 0.01	175	47	42 Ceti
87 13	...	...	18.99	0.153	.....	...	...	W.B. (1) I. 229
89 0 21.6	55.6	4	18.98	0.153	.....	...	57	Piazzi i. 57
83 19 25.2	58.9	4	18.97	0.156	.....	...	60	Piazzi i. 60
53 1 1.6	56.8	3	18.97	0.168	.....	179	55	47 Andromedæ
22 36 9.4	58.9	3	18.96	0.204	- 0.02	178	53	36 Cassiopeiæ, ψ
30 29 39.6	56.9	3	18.94	0.191	+ 0.05	180	62	37 Cassiopeiæ, δ
115 5 7.4	59.9	3	18.94	0.146	.....	...	68	Piazzi i. 68
98 54 26.7	57.4	2	18.93	0.153	+ 0.22	184	67	45 Ceti, θ
16 31 10.4	61.9	1	18.90	0.236	.....	...	...	Groombridge 307
45 19 5.0	57.1	5	18.86	0.183	+ 0.11	186	74	48 Andromedæ, ω
85 22 10.7	57.0	3	18.84	0.163	.....	194	83	95 Piscium
20 27 28.9	58.2	5	18.82	0.225	+ 0.08	188	80	38 Cassiopeiæ, A
20 42 15.6	59.2	3	18.78	0.228	.....	193	86	Bradley 193
22 18 46.6	59.9	4	18.78	0.224	.....	...	88	Piazzi i. 88
84 34 45.3	55.4	8	18.76	0.169	+ 0.18	199	95	98 Piscium, μ
87 45 13.6	59.9	2	18.74	0.169	.....	...	...	*
116 55 55.4	56.9	4	18.73	0.155	.....	...	99	Piazzi i. 99
75 22 37.2	58.0	12	- 18.72	+ 0.175	0.00	203	98	99 Piscium, η

173. It is probable that the observed N.P.D. of this star is too great by one degree, and that it is identical with W.B. (1) I. 388.

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
176	7.4	3	Piazzi i. 101	1 24 18.88	57.9	2	+ 3.158	+ 0.0116	.....
177	6.6	3	Piazzi i. 110	1 27 14.91	59.1	5	3.231	+ 0.0162	.....
178	7.0	1	100 Piscium (1st star)	1 27 25.66	61.9	1	3.176	+ 0.0127	.....
179	8.3	1	100 Piscium (2nd star)	1 27 26.56	61.9	1	3.176	+ 0.0127	.....
180	8.1	6	Radcliffe 467	1 28 9.16	57.7	9	8.290	+ 1.2705	.....
181	...	...	101 Piscium	1 28 17.35	61.2	3	3.197	+ 0.0138	— 0.002
182	6.3	2	Piazzi i. 120	1 28 20.54	56.4	4	3.223	+ 0.0155	.....
183	4.5	1	50 Andromedæ	1 28 35.54	56.9	2	3.506	+ 0.0367	— 0.016
184	9.3	2	W.B. (1) I. 486	1 28 38.15	57.9	1	3.176	+ 0.0124	.....
185	...	...	Piazzi i. 123	1 28 43.53	61.8	2	3.133	+ 0.0100	.....
186	9.0	3.5	Redhill 227	1 29 13.71	57.7	2	8.203	+ 1.2175	.....
187	3.5*	...	51 Andromedæ	1 29 24.88	57.5	5	3.635	+ 0.0480	+ 0.006
188	5.9	4	102 Piscium, π	1 29 40.80	57.6	3	3.175	+ 0.0124	— 0.007
189	7.1	2	Bradley 217	1 30 14.02	57.9	3	3.175	+ 0.0125	+ 0.008
190	6.9	2	Piazzi i. 131	1 30 37.84	59.6	3	2.980	+ 0.0018	.....
191	5.8	2	42 Cassiopeiæ	1 32 8.36	59.0	3	4.503	+ 0.1512	.....
192	6.0	0.5	Piazzi i. 140	1 32 15.54	56.9	1	2.820	— 0.0043	.....
193	5.0*	...	53 Andromedæ, τ	1 32 19.69	57.2	3	3.510	+ 0.0359	.....
194	...	...	W.B. (1) I. 557	1 32 23.51	57.9	2	3.208	+ 0.0143	.....
195	...	...	W.B. (1) I. 558	1 32 24.40	57.9	1	3.208	+ 0.0143	.....
196	8.3	2	Groombridge 339	1 32 32.05	58.9	3	11.061	+ 2.5930	.....
197	6.5	1	Bradley 222	1 33 2	...	...	3.914	+ 0.0740	+ 0.008
198	7.0	2	Piazzi i. 139	1 33 11.12	58.0	2	3.982	+ 0.0811	.....
199	5.3	1	Piazzi i. 142	1 33 16.59	54.8	1	3.547	+ 0.0388	.....
200	6.5	3	Bradley 225	1 33 44.99	59.2	3	3.371	+ 0.0250	.....
201	6.0*	...	44 Cassiopeiæ	1 33 52.98	54.8	1	3.988	+ 0.0819	.....
202	8.0	1	Lalande 3095	1 33 56	...	...	3.244	+ 0.0164	.....
203	4.7*	...	106 Piscium, ν	1 34 8.82	60.6	10	3.117	+ 0.0090	— 0.004
204	6.0	0.5	107 Piscium	1 34 54.05	59.0	2	3.263	+ 0.0176	— 0.022
205	...	...	54 Andromedæ	1 34 54.06	57.9	2	3.712	+ 0.0525	— 0.001
206	8.5	1	Redhill 247	1 35 4.75	58.0	1	8.617	+ 1.3007	.....
207	9.6	3	*	1 36 12.75	57.9	3	3.233	+ 0.0196	.....
208	8.0	2	Radcliffe 500	1 36 57.56	56.3	5	17.382	+ 7.3281	.....
209	3.5	1	52 Ceti, τ	1 37 33.82	57.8	7	2.907	— 0.0004	— 0.123
210	5.8	3	Piazzi i. 159	1 37 39.85	57.9	4	+ 4.163	+ 0.0979	.....

180. Identical with Redhill 225.

208. Identical with Redhill 251.

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazz.	Name of Star.
0 " "	1800+		"	"	"			
79 50 2.2	57.4	4	- 18.71	+ 0.173	.....	...	101	Piazz i. 101
72 15 20.8	55.4	4	18.62	0.182	.....	...	110	Piazz i. 110
78 9	...	...	18.61	0.179	.....	208	111	100 Piscium (1st star)
78 9	...	...	18.61	0.179	.....	...	...	100 Piscium (2nd star)
5 29 30.7	55.9	1	18.59	0.462	.....	...	...	Radcliffe 467
76 3 21.2	61.4	2	18.59	0.183	+ 0.01	211	118	101 Piscium
73 17 4.8	58.6	3	18.58	0.184	.....	...	120	Piazz i. 120
49 17 46.2	58.4	2	18.57	0.199	+ 0.39	209	119	50 Andromedæ
78 21 48.3	61.9	1	18.57	0.183	.....	...	...	W.B. (1) I. 486
83 4	...	...	18.57	0.179	.....	...	123	Piazz i. 123
5 38 54.1	58.9	2	18.56	0.462	.....	...	...	Redhill 227
42 4 58.2	59.2	3	18.55	0.209	+ 0.14	212	124	51 Andromedæ
78 34 33.2	57.2	4	18.54	0.185	- 0.03	214	126	102 Piscium, π
78 38 13.4	55.9	4	18.52	0.185	.....	217	128	Bradley 217
100 7 21.9	59.9	2	18.50	0.175	.....	...	131	Piazz i. 131
20 5 14.3	58.4	3	18.46	0.265	.....	215	132	42 Cassiopeiæ
115 44 10.7	60.2	4	18.45	0.168	.....	...	140	Piazz i. 140
50 8 1.2	57.9	2	18.45	0.208	.....	221	137	53 Andromedæ, τ
75 27	...	...	18.45	0.192	.....	...	...	W.B. (1) I. 557
75 27	...	...	18.45	0.192	.....	...	...	W.B. (1) I. 558
3 45 43.0	55.9	4	18.44	0.642	.....	...	...	Groombridge 339
32 4 48.9	57.9	1	18.43	0.233	.....	222	...	Bradley 222
30 9 40.1	58.9	1	18.42	0.238	.....	...	139	Piazz i. 139
48 5 26.6	58.9	1	18.42	0.213	.....	...	142	Piazz i. 142
60 39 44.4	55.0	1	18.40	0.203	.....	225	...	Bradley 225
30 9 24.7	57.0	1	18.39	0.240	+ 0.04	224	143	44 Cassiopeiæ
72 3 28.4	61.9	1	18.39	0.197	.....	...	...	Lalande 3095
85 13 19.1	55.3	5	18.39	0.190	+ 0.04	228	150	106 Piscium, ν
70 24 47.7	58.9	5	18.36	0.199	+ 0.68	229	154	107 Piscium
40 1 6.2	60.5	2	18.36	0.226	+ 0.03	227	151	54 Andromedæ
5 33	...	...	18.35	0.514	.....	...	...	Redhill 247
73 36	...	...	18.31	0.200	.....	...	...	*
2 11 46.7	58.9	1	18.29	1.049	.....	...	...	Radcliffe 500
106 40 32.4	56.4	4	18.26	0.183	- 0.85	233	163	52 Ceti, τ
26 50 25.0	56.5	4	- 18.26	+ 0.258	.....	...	159	Piazz i. 159

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
211	4.5	1	110 Piscium, ϵ	1 38 0.28	58.9	5	+ 3.154	+ 0.0110	+ 0.006
212	5.4	1	Sculptoris, ϵ	1 39 5.24	59.3	3	2.802	- 0.0039	.....
213	6.5	2	Piazzi i. 166	1 39 13.36	59.0	4	3.643	+ 0.0445	.....
214	...	...	Lalande 3259	1 39 46.50	59.2	3	3.285	+ 0.0184	.....
215	6.2	3	Piazzi i. 170	1 40 23.90	60.0	4	3.503	+ 0.0330	.....
216	8.7	1	Lalande 3285	1 40 52	...	...	3.299	+ 0.0191	.....
217	7.0	3	Bradley 230	1 40 55.20	58.4	2	5.643	+ 0.3318	.....
218	7.4	3	Lalande 3310	1 41 36.14	61.9	1	3.349	+ 0.0222	.....
219	6.4	3	Piazzi i. 176	1 42 0.50	56.2	5	3.789	+ 0.0557	.....
220	3.3	2	45 Cassiopeiæ, ϵ	1 44 21.63	57.9	5	4.225	+ 0.1036	+ 0.006
221	7.0	1	Lalande 3405	1 44 22.67	59.3	5	3.327	+ 0.0205	.....
222	3.0	1	55 Ceti, ζ	1 44 33.06	58.4	4	2.957	+ 0.0021	- 0.002
223	...	...	Piazzi i. 191	1 44 36.49	61.9	1	3.177	+ 0.0120	.....
224	3.7*	...	2 Trianguli, α	1 45 6.53	57.7	5	3.399	+ 0.0248	0.000
225	9.5	0.5	W.B. (2) I. 1040	1 45 20	...	...	3.406	+ 0.0252	.....
226	4.2	2	5 Arietis, γ (North)...	1 45 51.19	58.9	3	3.273	+ 0.0172	.....
227	5.0	2	5 Arietis, γ (South)...	1 45 51.25	57.9	2	3.273	+ 0.0172	+ 0.002
228	2.7*	...	6 Arietis, β	1 46 54.73	59.4	19	3.292	+ 0.0182	+ 0.002
229	9.4	2	Lalande 3484	1 46 47	...	...	3.398	+ 0.0244	.....
230	6.0	1	Bradley 253	1 47 38	...	...	3.521	+ 0.0324	.....
231	6.0	2	56 Andromedæ	1 47 50.92	57.9	2	3.521	+ 0.0324	.....
232	6.4	2	7 Arietis	1 48 3	...	...	3.328	+ 0.0201	.....
233	6.7	5	Piazzi i. 209	1 48 39.77	58.9	3	3.084	+ 0.0077	.....
234	6.7	2	Groombridge 410	1 49 16.59	58.9	1	5.334	+ 0.2481	.....
235	9.0	3	Groombridge 409	1 49 18.17	56.9	1	5.329	+ 0.2473	.....
236	5.5	3	8 Arietis, ι	1 49 42.46	58.5	4	3.262	+ 0.0163	.....
237	5.9	3	47 Cassiopeiæ	1 51 14.00	57.3	5	5.691	+ 0.3064	.....
238	6.4	3	Piazzi i. 222	1 51 49.87	57.4	4	3.305	+ 0.0185	.....
239	...	...	Lalande 3653	1 51 55.95	61.0	1	3.561	+ 0.0342	.....
240	6.8	2.5	Piazzi i. 225	1 52 38.53	58.2	3	3.131	+ 0.0098	.....
241	...	...	Piazzi i. 227	1 52 51.03	61.9	1	3.141	+ 0.0103	.....
242	6.0	1	112 Piscium	1 52 52.41	58.9	3	3.099	+ 0.0085	.....
243	...	...	51 Cassiopeiæ	1 53 21.70	58.9	1	5.272	+ 0.2281	.....
244	8.1	4	Radcliffe 559	1 53 23.67	57.5	5	27.493	+ 17.0884	.....
245	5.0	1	113 Piscium, α^1	1 54 48.13	59.9	5	+ 3.095	+ 0.0084	.....

212. The designation is Lacaille's.

243. Identical with Redhill 284.

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
81 32 53.8	57.2	3	- 18.25	+ 0.199	- 0.01	232	164	110 Piscium, α
115 45 12.9	55.9	2	18.21	0.178	.....	...	168	Sculptoris, ϵ
44 28 9.7	57.2	3	18.21	0.230	.....	...	166	Piazzi i. 166
69 17 22.1	57.9	3	18.18	0.210	.....	...	...	Lalande 3259
52 44 45.9	59.2	3	18.16	0.224	.....	...	170	Piazzi i. 170
68 17 54.3	61.5	2	18.14	0.213	.....	...	...	Lalande 3285
12 29 51.7	60.0	3	18.14	0.359	.....	230	165	Bradley 230
64 13 29.5	60.2	3	18.12	0.217	.....	...	...	Lalande 3310
38 45 31.9	57.2	3	18.10	0.246	.....	...	176	Piazzi i. 176
27 1 18.7	56.2	5	18.01	0.279	+ 0.02	239	184	45 Cassiopeiæ, ϵ
66 34 38.6	58.4	2	18.01	0.221	.....	...	...	Lalande 3405
101 1 43.5	58.3	5	18.00	0.197	+ 0.12	247	192	55 Ceti, ζ
79 53	...	...	18.00	0.212	.....	...	191	Piazzi i. 191
61 6 14.5	56.7	4	17.99	0.227	+ 0.23	245	193	2 Trianguli, α
60 39 0.1	61.0	1	17.98	0.228	.....	...	...	W.B. (2) I. 1040
71 23 30.6	57.7	4	17.95	0.221	+ 0.11	249	196	5 Arietis, γ (North)
71 23 39.3	58.2	4	17.95	0.221	+ 0.11	248	197	5 Arietis, γ (South)
69 52 39.8	58.6	6	17.91	0.224	+ 0.11	252	202	6 Arietis, β
61 32 12.9	57.9	2	17.91	0.231	.....	...	...	Lalande 3484
53 24 39.2	61.9	1	17.89	0.240	.....	253	203	Bradley 253
53 26 12.6	58.6	3	17.87	0.240	.....	255	204	56 Andromedæ
67 6 38.4	58.9	2	17.87	0.228	.....	257	205	7 Arietis
88 50 45.5	59.7	4	17.84	0.212	.....	...	209	Piazzi i. 209
15 10 49.6	61.5	2	17.82	0.365	.....	...	...	Groombridge 410
15 12 41.4	60.0	2	17.82	0.363	.....	...	...	Groombridge 409
72 52 2.3	58.5	3	17.80	0.227	.....	262	214	8 Arietis, ι
13 23 41.1	54.7	3	17.74	0.395	.....	254	208	47 Cassiopeiæ
69 37 23.3	60.3	3	17.72	0.234	.....	...	222	Piazzi i. 222
52 5	...	...	17.71	0.252	.....	...	...	Lalande 3653
84 38 45.2	58.9	2	17.68	0.223	.....	...	225	Piazzi i. 225
83 46	...	...	17.67	0.224	.....	...	227	Piazzi i. 227
87 34 27.1	54.9	3	17.67	0.221	.....	271	226	112 Piscium
16 5	...	...	17.65	0.373	.....	264	220	51 Cassiopeiæ
1 29 21.0	56.9	3	17.65	1.912	.....	...	...	Radcliffe 559
87 54 46.2	61.0	2	- 17.59	+ 0.224	.....	277	238	113 Piscium, α^1

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
87 54 50.1	56.2	4	— 17.59	+ 0.224	.....	...	...	113 Piscium, α^2
48 20 39.3	56.9	4	17.57	0.264	+ 0.06	276	236	57 Andromedæ, γ^1
48 21 31.2	56.9	1	17.57	0.264	.....	...	237	57 Andromedæ, γ^2
50 37 10.3	61.1	1	17.57	0.261	.....	...	...	W.B. (2) I. 1310
79 39 28.4	58.9	1	17.56	0.232	.....	...	240	Piazzi i. 240
64 44 31.9	56.0	1	17.55	0.246	.....	278	242	10 Arietis
64 45 14.6	56.7	5	17.53	0.246	.....	279	245	Bradley 279
19 6 31.8	56.9	3	17.49	0.362	.....	274	239	54 Cassiopeiaë
82 56 13.6	56.9	3	17.48	0.233	.....	...	249	Piazzi i. 249
49 8 18.5	58.3	3	17.48	0.268	.....	...	...	Lalande 3825
68 1 15.6	60.4	2	17.42	0.248	.....	285	250	12 Arietis, κ
67 12 3.6	58.3	5	17.40	0.251	+ 0.15	287	253	13 Arietis, α
52 48 23.6	58.0	2	17.36	0.268	.....	288	254	58 Andromedæ
1 55 52.3	57.9	1	17.34	1.655	.....	...	...	Radcliffe 606
55 40 35.9	56.5	5	17.32	0.267	+ 0.05	290	260	4 Trianguli, β
39 36 33.6	61.9	1	17.30	0.294	.....	...	...	Oeltz. Arg. (N.Z.) 2423
41 12 32.9	61.5	2	17.25	0.294	.....	...	...	Oeltz. Arg. (N.Z.) 2442
41 3 50.4	61.0	2	17.25	0.294	.....	...	...	Oeltz. Arg. (N.Z.) 2443
64 43 30.8	58.6	3	17.22	0.260	+ 0.01	298	269	16 Arietis
69 17 4.9	58.9	1	17.21	0.256	.....	...	1	Piazzi ii. 1
40 52 43.0	62.0	1	17.21	0.297	.....	...	...	Oeltz. Arg. (N.Z.) 2462
82 5 17.3	60.9	3	17.19	0.245	+ 0.14	302	6	64 Ceti
41 16 36.0	61.9	1	17.19	0.297	.....	...	...	Oeltz. Arg. (N.Z.) 2473
60 21 18.6	59.0	1	17.18	0.266	.....	301	5	6 Trianguli (1st star)
60 21	...	...	17.18	0.266	.....	...	...	6 Trianguli (2nd star)
39 35 13.9	57.0	1	17.18	0.302	+ 0.20	299	3	6 Persei
69 26 55.8	57.5	2	17.15	0.259	— 0.01	303	11	17 Arietis, η
36 7 28.4	61.0	1	17.13	0.312	.....	...	...	Oeltz. Arg. (N.Z.) 2511
93 3	...	...	17.12	0.238	.....	...	17	66 Ceti (1st star)
93 2 59.3	57.9	1	17.12	0.238	.....	308	18	66 Ceti (2nd star)
34 39 33.0	57.9	1	17.10	0.318	.....	...	...	*
64 52 7.3	57.5	5	17.02	0.269	.....	314	32	20 Arietis
56 25 5.7	55.7	4	16.99	0.282	+ 0.25	317	34	8 Trianguli, δ
33 30 51.7	58.2	4	16.95	0.332	.....	316	35	Bradley 316
97 4 8.4	58.0	2	— 16.92	+ 0.241	+ 0.14	321	47	67 Ceti

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.			Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h.	m.	s.	1800+		s.	s.	s.
281	7.0	2	Lalande 4249	2	10	0	...	...	+ 2.981	+ 0.0048	.....
282	5.7*	...	22 Arietis, θ	2	10	20.80	55.9	2	3.324	+ 0.0179	- 0.002
283	6.0	1	Piazzi ii. 52	2	10	45.16	56.9	1	3.086	+ 0.0083	.....
284	Var.	...	68 Ceti, σ	2	12	16.54	58.8	10	3.026	+ 0.0063	- 0.001
285	6.1	1.5	Piazzi ii. 59	2	12	42.44	57.9	1	2.705	- 0.0017	.....
286	8.0	2	Radcliffe 690	2	13	0.57	61.0	1	4.184	+ 0.0727	.....
287	9.0	1	*	2	13	57	...	...	4.462	+ 0.0967	.....
288	9.4	5	Radcliffe 674	2	15	23.29	55.6	8	27.092	+ 13.3041	.....
289	5.3	1	Fornacis, κ	2	16	8.24	56.9	3	2.732	- 0.0007	.....
290	9.3	1	Oeltz. Arg. (N.Z.) 2740	2	17	1.86	57.9	1	4.470	+ 0.0949	.....
291	7.3	1	Piazzi ii. 75	2	17	1.98	59.5	2	3.192	+ 0.0122	.....
292	6.0*	...	Lacaille 720	2	17	7.92	56.9	1	2.628	- 0.0023	.....
293	6.0*	...	Lacaille 718	2	17	8.56	57.5	2	2.678	- 0.0016	.....
294	...	...	24 Arietis, ξ	2	17	18.93	61.0	1	3.205	+ 0.0126	0.000
295	6.5	3	66 Andromedæ	2	18	29.47	58.0	4	3.975	+ 0.0539	.....
296	7.7	3	Piazzi ii. 83	2	18	40.12	59.5	2	3.206	+ 0.0126	.....
297	6.0	1	11 Trianguli	2	19	10.73	61.0	1	3.534	+ 0.0270	.....
298	6.7	2	Bradley 341	2	19	15.38	60.0	3	3.205	+ 0.0126	+ 0.002
299	8.8	4	Radcliffe 693	2	19	34.99	56.7	7	30.341	+ 16.3893	.....
300	6.7	1	25 Arietis	2	19	56.76	57.9	1	3.201	+ 0.0124	.....
301	4.5	1	73 Ceti, ξ^2	2	20	43.11	58.9	10	3.178	+ 0.0115	+ 0.001
302	7.8	10	Radcliffe 713	2	21	25.81	56.5	13	15.482	+ 3.5520	.....
303	6.6	5	27 Arietis	2	23	8.81	56.6	3	3.312	+ 0.0166	0.000
304	6.7	1	Oeltz. Arg. (N.Z.) 2863	2	23	50.11	57.9	1	4.991	+ 0.1402	.....
305	...	...	75 Ceti	2	25	2.08	60.6	3	3.049	+ 0.0074	- 0.002
306	...	...	76 Ceti, σ	2	25	27.13	58.9	1	2.846	+ 0.0023	.....
307	7.5	1.5	Piazzi ii. 115	2	27	12.44	59.0	2	4.074	+ 0.0570	.....
308	6.7	2	Piazzi ii. 118	2	27	39.59	60.2	4	3.168	+ 0.0111	.....
309	6.0	1	77 Ceti	2	27	48.33	62.0	1	2.953	+ 0.0049	.....
310	6.0	2	Bradley 344	2	27	52.98	61.0	1	8.063	+ 0.6354	.....
311	7.0	1	79 Ceti	2	28	18.93	56.9	1	3.013	+ 0.0065	- 0.012
312	6.0	1	Piazzi ii. 123	2	28	24.08	57.9	1	3.160	+ 0.0109	.....
313	4.8	1	78 Ceti, ν	2	28	31.81	59.5	5	3.142	+ 0.0103	- 0.008
314	7.3?	0.5	30 Arietis	2	28	53.79	58.9	1	3.432	+ 0.0210	+ 0.009
315	6.3	1	Bradley 361	2	28	56.63	58.9	1	+ 3.433	+ 0.0210	+ 0.008

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
0 1 "	1800+		"	"	"			
97 13 46.5	60.0	4	- 16.91	+ 0.241	.....	...	48	Lalande 4249
70 44 55.1	58.6	3	16.90	0.268	+ 0.01	320	49	22 Arietis, θ
88 54 23.6	58.2	4	16.88	0.250	.....	...	52	Piazzi ii. 52
93 36 55.3	58.3	4	16.81	0.248	+ 0.23	329	56	68 Ceti, σ
116 36 37.4	60.2	4	16.79	0.233	.....	...	59	Piazzi ii. 59
33 23 51.3	58.5	2	16.77	0.342	.....	...	...	Radcliffe 690
27 57 4.5	62.0	1	16.73	0.366	.....	...	...	*
1 46 31.7	61.9	1	16.65	2.208	.....	...	...	Radcliffe 674
114 27 13.3	55.7	4	16.62	0.230	.....	...	73	Fornacis, κ
28 18	...	...	16.57	0.374	.....	...	...	Oeltz. Arg. (N.Z.) 2740
80 55 17.4	57.9	1	16.57	0.269	.....	...	75	Piazzi ii. 75
120 30 19.9	61.0	1	16.57	0.223	.....	...	...	Lacaille 720
117 37 50.8	55.0	1	16.57	0.227	.....	...	...	Lacaille 718
80 1 31.1	61.0	1	16.56	0.271	+ 0.05	338	76	24 Arietis, ξ
40 3 31.2	56.6	3	16.51	0.336	.....	337	79	66 Andromedæ
79 59 8.8	58.9	3	16.49	0.273	.....	...	83	Piazzi ii. 83
58 49 45.5	59.3	3	16.47	0.300	.....	340	84	11 Trianguli
80 4 0.6	59.6	3	16.46	0.274	.....	341	85	Bradley 341
1 36	...	...	16.45	2.539	.....	...	...	Radcliffe 693
80 25 31.4	60.4	2	16.43	0.275	.....	345	91	25 Arietis
82 10 9.5	56.0	5	16.39	0.274	+ 0.02	347	94	73 Ceti, ξ^2
3 34 3.3	61.5	2	16.36	1.313	.....	...	...	Radcliffe 713
72 55 2.4	57.3	9	16.27	0.290	+ 0.09	351	101	27 Arietis
22 15	...	...	16.23	0.434	.....	...	...	Oeltz. Arg. (N.Z.) 2863
91 39 19.9	58.9	1	16.17	0.270	+ 0.06	354	110	75 Ceti
105 51 42.0	58.2	5	16.14	0.253	.....	356	113	76 Ceti, σ
38 39 11.0	59.1	4	16.05	0.361	.....	...	115	Piazzi ii. 115
83 8 26.0	59.3	3	16.03	0.285	.....	...	118	Piazzi ii. 118
98 28 23.4	60.2	3	16.02	0.266	.....	359	121	77 Ceti
9 9 3.8	58.5	2	16.02	0.714	.....	344	...	Bradley 344
94 9 31.5	59.0	2	16.00	0.272	+ 0.44	363	124	79 Ceti
83 48	...	...	15.99	0.285	.....	...	123	Piazzi ii. 123
85 1 8.3	56.0	1	15.99	0.284	+ 0.03	362	125	78 Ceti, ν
65 57 49.2	61.5	2	15.97	0.310		360	126	30 Arietis
65 57 53.1	61.5	2	- 15.97	+ 0.310	- 0.17	361	128	Bradley 361

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				h. m. s.	1800+		s.	s.	s.
316	...	...	Bradley 353	2 28 58	...	...	+ 5.424	+ 0.1804	
317	5.5*	...	31 Arietis	2 29 0.08	56.0	2	3.242	+ 0.0136	+ 0.017
318	7.3	2	Bradley 358	2 30 25	...	...	5.038	+ 0.1370	
319	8.9	4	Radcliffe 751	2 30 31.21	55.6	8	12.950	+ 2.1301	
320	5.6	2	32 Arietis, ν	2 30 52.48	59.5	2	3.392	+ 0.0192	- 0.002
321	7.0	5	Piazzi ii. 140	2 31 31.42	57.9	4	3.217	+ 0.0127	
322	8.9	6	Radcliffe 756	2 31 59.07	55.9	9	13.052	+ 2.1429	
323	5.3	1	82 Ceti, δ	2 32 18.63	61.4	2	3.068	+ 0.0081	+ 0.003
324	8.3	3	Radcliffe 745	2 32 45.47	57.6	3	26.450	+ 10.7901	
325	4.7	1	83 Ceti, ϵ	2 32 47.43	57.9	4	2.889	+ 0.0037	+ 0.005
326	5.0*	...	12 Persei	2 33 25.44	56.3	4	3.759	+ 0.0359	- 0.002
327	6.5	1	84 Ceti	2 34 3.82	59.3	3	3.053	+ 0.0077	
328	6.8	3	Bradley 379	2 34 28.61	58.3	3	3.218	+ 0.0126	
329	6.6	1	34 Arietis, μ	2 34 28.81	61.0	1	3.366	+ 0.0179	- 0.001
330	4.0*	...	13 Persei, θ	2 34 39.34	57.0	1	4.020	+ 0.0506	+ 0.033
331	3.3*	...	86 Ceti, γ	2 36 3.01	58.6	18	3.111	+ 0.0093	- 0.011
332	...	...	36 Arietis	2 36 31	...	...	3.333	+ 0.0166	
333	5.4	3	38 Arietis	2 37 20.05	59.0	3	3.250	+ 0.0136	+ 0.008
334	4.7	1	{ Bradley 387	2 37 22.72	54.9	3	3.214	+ 0.0123	+ 0.017
			{ μ Ceti						
335	8.8	5.5	Radcliffe 780	2 37 36.58	55.4	8	11.234	+ 1.2477	
336	6.5	2	Lacaille 850	2 38 1.17	57.9	1	2.655	+ 0.0002	
337	4.3*	...	1 Eridani, τ^1	2 38 34.39	59.0	2	2.776	+ 0.0020	+ 0.022
338	5.0*	...	39 Arietis	2 39 34.79	57.2	3	3.541	+ 0.0244	+ 0.009
339	9.1	2	*	2 40 4.69	61.0	1	3.290	+ 0.0148	
340	...	...	40 Arietis	2 40 41	...	...	3.347	+ 0.0168	+ 0.002
341	5.5	1	42 Arietis, π	2 41 29.00	60.0	3	3.335	+ 0.0163	- 0.002
342	4.0*	...	41 Arietis	2 41 45.10	57.6	3	3.508	+ 0.0228	+ 0.003
343	4.7*	...	16 Persei	2 41 45.44	56.9	3	3.743	+ 0.0333	+ 0.017
344	5.2	2	17 Persei	2 42 54.07	57.5	4	3.670	+ 0.0297	
345	6.0	1	43 Arietis, σ	2 43 46.05	61.5	2	3.299	+ 0.0149	- 0.002
346	5.0	1	2 Eridani, τ^2	2 44 41.43	58.6	4	2.724	+ 0.0016	- 0.006
347	7.2	2	Piazzi ii. 203	2 45 24	...	...	3.324	+ 0.0157	
348	9.1	3	Redhill 412	2 45 33.13	57.6	3	26.581	+ 9.7071	
349	7.8	13	Radcliffe 827	2 47 42.43	56.5	17	12.014	+ 1.5219	
350	6.1	5	46 Arietis, ρ^3	2 48 32.26	58.2	7	+ 3.354	+ 0.0165	+ 0.018

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0 1 "	1800+		"	"	"			
18 59 51.7	59.0	1	- 15.97	+ 0.486		353	...	Bradley 353
78 9 39.8	56.0	2	15.96	0.293	+ 0.09	364	129	31 Arietis
22 32 25.4	56.7	4	15.88	0.452	.....	358	...	Bradley 358
4 43 27.9	54.9	1	15.88	1.160	.....	...	...	Radcliffe 751
68 38 44.5	59.3	4	15.86	0.310	+ 0.02	367	136	32 Arietis, ν
79 58 4.3	59.6	3	15.83	0.295	.....	...	140	Piazzi ii. 140
4 42 53.2	56.5	2	15.80	1.179	.....	...	...	Radcliffe 756
90 16	...	...	15.79	0.283	+ 0.03	372	144	82 Ceti, δ
2 2	...	...	15.76	2.403	.....	...	...	Radcliffe 745
102 28 7.5	57.1	3	15.76	0.267	+ 0.25	375	149	83 Ceti, ϵ
50 24 3.4	57.3	3	15.73	0.346	+ 0.18	371	146	12 Persei
91 17 35.9	57.0	2	15.69	0.283	.....	378	152	84 Ceti
80 3 19.0	58.4	2	15.67	0.299	.....	379	155	Bradley 379
70 35 14.3	60.0	3	15.67	0.313	+ 0.05	377	153	34 Arietis, μ
41 22 1.7	60.0	2	15.66	0.371	+ 0.14	374	150	13 Persei, θ
87 21 22.2	55.7	7	15.58	0.292	+ 0.19	383	161	86 Ceti, γ
72 49 52.7	58.9	1	15.56	0.314	+ 0.04	384	162	36 Arietis
78 8 44.6	55.7	3	15.51	0.307	+ 0.10	386	166	38 Arietis
80 28 44.0	59.2	5	15.51	0.303	+ 0.07	387	167	{ Bradley 387 μ Ceti
5 56 12.6	59.0	1	15.50	1.047	.....	...	...	Radcliffe 780
116 5 30.6	59.2	4	15.47	0.253	.....	...	...	Lacaille 850
109 10 4.4	58.3	3	15.44	0.265	- 0.02	390	175	1 Eridani, τ^1
61 20 10.9	57.2	3	15.39	0.338	+ 0.11	389	178	39 Arietis
75 46 39.3	60.0	2	15.36	0.316	.....	...	...	*
72 18 9.5	61.9	1	15.33	0.322	+ 0.02	393	182	40 Arietis
73 7 11.9	58.0	2	15.28	0.322	- 0.02	397	185	42 Arietis, π
63 19 8.3	57.1	5	15.27	0.338	+ 0.13	395	186	41 Arietis
52 15 36.5	57.1	5	15.27	0.361	+ 0.07	394	183	16 Persei
55 31 7.3	57.3	5	15.20	0.356	.....	398	188	17 Persei
75 29 50.0	61.9	1	15.15	0.322	+ 0.05	400	192	43 Arietis, σ
111 34 55.9	57.0	1	15.10	0.268	+ 0.03	404	202	2 Eridani, τ^2
74 5 24.8	57.9	2	15.06	0.327	.....	...	203	Piazzi ii. 203
2 9 12.7	57.4	3	15.04	2.570	.....	...	...	Redhill 412
5 42 15.7	58.3	4	14.92	1.177		...	...	Radcliffe 827
72 32 15.0	57.2	4	- 14.88	+ 0.334	+ 0.20	408	213	46 Arietis, ρ^3

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				h. m. s.	1800+		s.	s.	s.
351	8.0	9	Radcliffe 836	2 49 14.16	56.1	9	+12.313	+1.5955	
352	3.0*	...	3 Eridani, η	2 49 35.52	57.6	3	2.922	+0.0051	+0.005
353	6.2	4	47 Arietis	2 50 4.81	59.8	5	3.403	+0.0180	+0.016
354	6.5	8	Bradley 396	2 50 17.31	57.9	5	8.733	+0.6511	.....
355	...	...	Bradley 414	2 50 52.02	61.0	1	3.421	+0.0185	+0.003
356	4.3*	...	48 Arietis, ϵ	2 51 12.73	58.4	2	3.417	+0.0184	-0.001
357	...	...	6 Eridani	2 51 52.54	57.9	2	2.664	+0.0014	.....
358	7.4	4	Bradley 416	2 52 30.87	57.5	2	3.725	+0.0303	.....
359	...	...	49 Arietis	2 53 39.78	61.0	1	3.518	+0.0218	-0.005
360	7.0	2	51 Arietis	2 54 8.37	57.0	1	3.522	+0.0218	.....
361	6.0*	...	8 Eridani, ρ^1	2 54 17.35	57.4	2	2.939	+0.0055	.....
362	2.3*	...	92 Ceti, α	2 54 57.89	58.9	18	3.129	+0.0098	-0.002
363	6.0	0.5	Piazzi ii. 248	2 55 35.41	57.9	1	2.566	+0.0007	.....
364	...	...	9 Eridani, ρ^2	2 55 50	...	...	2.938	+0.0055	.....
365	4.0*	...	25 Persei, ρ	2 56 12.96	57.3	5	3.806	+0.0331	+0.010
366	3.7*	...	11 Eridani, τ^3	2 56 13.08	55.9	1	2.655	+0.0016	.....
367	5.6	2	Bradley 417	2 56 51.94	57.0	1	6.293	+0.2360	.....
368	4.2	1	Persei, ι	2 58 58.65	57.6	5	4.157	+0.0497	.....
369	Var.	...	26 Persei, β	2 59 4.28	57.1	5	3.874	+0.0355	-0.002
370	...	...	53 Arietis	2 59 33.12	60.0	2	3.367	+0.0161	-0.005
371	6.0	7	Groombridge 595	2 59 50.93	58.4	10	12.715	+1.5741	.....
372	4.3*	...	27 Persei, κ	3 0 4.01	56.6	3	3.996	+0.0410	+0.016
373	7.2	5	Piazzi ii. 261	3 1 18.79	56.8	4	3.422	+0.0178	.....
374	5.6	3	Bradley 431	3 2 42.66	57.3	3	7.287	+0.3510	.....
375	4.3*	...	57 Arietis, δ	3 3 37.74	58.8	17	3.406	+0.0171	+0.010
376	5.6	1	94 Ceti	3 5 37.89	58.4	5	3.043	+0.0078	+0.014
377	3.3*	...	12 Eridani	3 6 7.51	56.4	4	2.522	+0.0011	+0.025
378	4.8	1	58 Arietis, ζ	3 6 51.58	56.7	4	3.436	+0.0177	-0.006
379	...	...	Bradley 448	3 7 43.14	57.9	1	5.180	+0.1119	.....
380	4.7	1	13 Eridani, ζ	3 9 2.11	58.8	4	2.911	+0.0054	-0.002
381	6.0	3	14 Eridani	3 9 48.71	60.0	7	2.904	+0.0053	.....
382	5.7	3	95 Ceti	3 11 12.72	58.0	5	3.047	+0.0079	.....
383	5.1	1	Piazzi iii. 32	3 11 52.64	56.0	1	3.612	+0.0229	.....
384	6.5	3	Piazzi iii. 28	3 11 57.79	56.0	2	4.197	+0.0472	
385	5.2	1	96 Ceti, κ^1	3 12 1.19	57.5	2	+3.121	+0.0094	

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o ' "	1800+		"	"	"			
5 33 42.2	56.5	2	- 14.83	+ 1.215		...	...	Radcliffe 836
99 27 26.9	57.6	5	14.81	0.294	+ 0.23	413	219	3 Eridani, η
69 53 42.5	57.3	3	14.78	0.342	+ 0.03	412	218	47 Arietis
9 4 41.4	58.2	4	14.77	0.868	.....	396	...	Bradley 396
68 57	...	...	.....	.....	0.00	414	...	Bradley 414
69 13 19.0	59.0	6	14.71	0.345	+ 0.02	415	224	48 Arietis, ϵ
114 10 17.6	61.0	3	14.67	0.271	.....	421	229	6 Eridani
54 26 24.0	57.6	3	14.63	0.378	.....	416	227	Bradley 416
64 5 38.7	57.5	2	14.56	0.359	+ 0.01	424	233	49 Arietis
63 56 20.7	57.0	4	14.53	0.361	.....	425	235	51 Arietis
98 13 1.9	58.3	3	14.53	0.302	.....	427	242	8 Eridani, ρ^1
86 27 42.6	55.2	4	14.49	0.322	+ 0.11	428	244	92 Ceti, α
118 37 46.9	58.0	2	14.45	0.266	.....	...	248	Piazzii ii. 248
98 14 18.1	60.3	3	14.44	0.304	.....	432	247	9 Eridani, ρ^2
51 43	...	...	14.41	0.392	+ 0.12	429	246	25 Persei, ρ
114 10 32.3	59.7	4	14.41	0.275	.....	434	249	11 Eridani, τ^3
16 8 38.0	57.0	4	14.37	0.646	.....	417	237	Bradley 417
40 55 31.4	56.3	3	14.25	0.433	.....	...	253	Persei, ι
49 35 13.0	59.2	4	14.24	0.404	- 0.01	436	254	26 Persei, β
72 39 46.6	61.0	3	14.21	0.353	+ 0.01	439	257	53 Arietis
5 35 43.2	56.7	4	14.19	1.316	.....	402	...	Groombridge 595
45 40 34.5	57.3	3	14.18	0.418	+ 0.15	438	256	27 Persei, κ
69 46 34.8	56.7	7	14.10	0.361	.....	...	261	Piazzii ii. 261
12 47 11.1	58.0	4	14.02	0.766	+ 0.08	431	255	Bradley 431
70 48 19.7	56.9	8	13.96	0.363	0.00	446	2	57 Arietis, δ
91 43 20.1	56.9	5	13.83	0.327	+ 0.08	450	8	94 Ceti
119 32 27.5	58.0	6	13.79	0.272	- 0.62	454	13	12 Eridani
69 28 36.3	56.5	5	13.75	0.371	+ 0.07	451	11	58 Arietis, ζ
24 51 50.9	58.0	1	13.70	0.558	+ 0.03	448	7	Bradley 448
99 20 28.5	57.0	1	13.61	0.317	- 0.02	457	22	13 Eridani, ζ
99 40 31.4	58.2	4	13.56	0.317	.....	...	26	14 Eridani
91 26 33.6	56.6	5	13.47	0.335	.....	461	31	95 Ceti
61 27 42.0	58.1	5	13.43	0.397	.....	...	32	Piazzii iii. 32
41 26 8.2	57.4	4	13.42	0.461	.....	...	28	Piazzii iii. 28
87 8 46.3	58.0	4	- 13.42	+ 0.344	.....	463	36	96 Ceti, κ^1

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.			Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h.	m.	s.	1800+		s.	s.	s.
386	6.9	5	60 Arietis	3	12	7.99	56.9	2	+ 3.539	+ 0.0204	.....
387	5.5*	...	61 Arietis, τ^1	3	13	9.05	57.7	3	3.448	+ 0.0175	- 0.001
388	6.2	3.5	Piazzi iii. 37	3	13	19.13	57.0	3	4.209	+ 0.0472	.....
389	2.0*	...	33 Persei, α	3	14	20.74	56.2	5	4.240	+ 0.0484	+ 0.002
390	8.3	3	Lalande 6247	3	15	59.75	57.9	1	3.366	+ 0.0149	.....
391	5.8	4	64 Arietis	3	16	2.85	58.3	6	3.526	+ 0.0196	- 0.003
392	7.4	6	Bradley 475	3	16	26.65	57.6	3	3.471	+ 0.0178	.....
393	...	...	1 Tauri, σ	3	17	16.92	60.7	3	3.224	+ 0.0115	.....
394	6.0	1	Piazzi iii. 56	3	18	50.83	54.7	3	4.260	+ 0.0477	.....
395	4.3	1	2 Tauri, ξ	3	19	35.27	61.1	1	3.238	+ 0.0117	+ 0.002
396	6.2	4	66 Arietis	3	20	16	...	...	3.493	+ 0.0182	- 0.001
397	6.3	1	Lacaille 1096	3	20	28.02	57.3	5	2.531	+ 0.0020	.....
398	6.1	6	Groombridge 642	3	21	0.49	57.0	14	18.527	+ 3.1818	.....
399	5.0	1	5 Tauri, f	3	23	8.84	60.5	4	3.301	+ 0.0130	+ 0.002
400	6.8	2	Piazzi iii. 74	3	23	26.77	58.0	3	4.203	+ 0.0435	.....
401	6.6	2	6 Tauri, t	3	25	1.60	61.0	1	3.235	+ 0.0114	+ 0.002
402	6.6	7	Piazzi iii. 87	3	26	10.18	57.2	6	3.400	+ 0.0151	.....
403	3.0*	...	18 Eridani, ϵ	3	26	20.23	56.9	6	2.889	+ 0.0054	- 0.067
404	...	...	19 Eridani, τ^5	3	27	36.39	57.9	1	2.645	+ 0.0030	- 0.003
405	8.9	4	Redhill 505	3	27	44.68	58.4	1	15.593	+ 2.0056	.....
406	7.0	1	9 Tauri	3	28	44.35	61.5	2	3.515	+ 0.0179	- 0.005
407	6.7	3.5	Bradley 496	3	29	36.45	57.8	4	3.074	+ 0.0082	.....
408	4.3*	...	10 Tauri	3	29	43.85	57.3	4	3.071	+ 0.0082	- 0.015
409	6.0*	...	Lacaille 1152	3	31	26.08	56.0	1	2.449	+ 0.0021	.....
410	6.0	1	Piazzi iii. 104	3	32	1.72	57.7	3	3.880	+ 0.0285	.....
411	6.2	2	21 Eridani	3	32	6.56	56.4	5	2.958	+ 0.0063	.....
412	...	...	11 Tauri	3	32	25	...	...	3.568	+ 0.0189	- 0.002
413	6.4	3	Piazzi iii. 102	3	32	48.80	57.0	5	5.565	+ 0.1165	.....
414	3.0*	...	39 Persei, δ	3	32	58.23	56.3	9	4.234	+ 0.0418	+ 0.001
415	5.9	4	22 Eridani	3	33	42.64	58.8	4	2.966	+ 0.0065	.....
416	4.6	3	Camelopardali, γ	3	35	38.56	57.0	5	6.191	+ 0.1608	.....
417	6.9	6	14 Tauri	3	35	41.87	57.3	3	3.449	+ 0.0156	+ 0.009
418	...	...	16 Tauri	3	36	29	...	...	3.551	+ 0.0180	+ 0.002
419	3.4	1	23 Eridani, δ	3	36	32.62	57.3	4	2.876	+ 0.0054	- 0.008
420	4.0*	...	17 Tauri	3	36	34.06	59.0	6	+ 3.547	+ 0.0179	0.000

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
64 50 40.0	59.6	3	— 13.41	+ 0.390	.....	462	34	60 Arietis
69 21 35.7	55.5	6	13.34	0.381	+ 0.03	465	40	61 Arietis, τ^1
41 17 28.9	60.0	2	13.34	0.463	.....	...	37	Piazzi iii. 37
40 38 27.0	58.0	4	13.27	0.470	+ 0.05	464	41	33 Persei, α
73 46 46.6	59.5	4	13.16	0.377	.....	...	...	Lalande 6247
65 46 30.9	58.1	1	13.15	0.394	+ 0.07	472	49	64 Arietis
68 27 29.6	57.3	3	13.13	0.389	.....	475	...	Bradley 475
81 27 58.9	57.5	2	13.07	0.362	+ 0.10	477	55	1 Tauri, ϵ
40 38 28.6	57.5	4	12.97	0.480	.....	...	56	Piazzi iii. 56
80 45 30.9	62.0	1	12.92	0.367	+ 0.05	481	63	2 Tauri, ξ
67 40 53.5	60.0	5	12.87	0.396	+ 0.14	482	65	66 Arietis
117 48 42.1	57.7	3	12.86	0.289	.....	...	...	Lacaille 1096
3 48 16.9	58.3	3	12.83	2.082	.....	...	...	Groombridge 642
77 32 47.1	57.0	1	12.68	0.378	+ 0.03	486	77	5 Tauri, f
42 31 40.0	57.5	4	12.66	0.482	.....	...	74	Piazzi iii. 74
81 6 8.5	57.7	3	12.55	0.373	+ 0.07	489	83	6 Tauri, t
72 37 44.1	56.7	4	12.47	0.394	.....	...	87	Piazzi iii. 87
99 56 4.1	56.6	5	12.46	0.336	+ 0.04	493	89	18 Eridani, ϵ
112 6	...	...	12.38	0.310	+ 0.03	495	95	19 Eridani, τ^5
4 48 21.0	61.0	3	12.36	1.796	.....	...	...	Redhill 505
67 15 19.3	62.0	1	12.30	0.410	+ 0.05	494	...	9 Tauri
89 52 18.1	55.8	6	12.23	0.360	.....	496	98	Bradley 496
90 2 40.4	56.2	7	12.23	0.360	.....	497	100	10 Tauri
120 17 30.2	58.9	1	12.11	0.290	.....	...	...	Lacaille 1152
52 52 29.4	56.7	4	12.07	0.457	.....	...	104	Piazzi iii. 104
96 4 40.0	58.2	4	12.07	0.350	.....	502	109	21 Eridani
65 7 36.0	61.0	1	12.04	0.421	+ 0.02	500	107	11 Tauri
23 14 34.0	58.0	3	12.01	0.655	.....	...	102	Piazzi iii. 102
42 39 50.3	58.4	3	12.00	0.499	+ 0.05	499	106	39 Persei, δ
95 39 59.1	58.0	1	11.95	0.352	.....	505	116	22 Eridani
19 6 18.1	58.7	3	11.82	0.735	.....	...	111	Camelopardali, γ
70 46 51.6	59.6	4	11.81	0.412	+ 0.05	507	125	14 Tauri
66 9 14.0	61.5	1	11.75	0.425	+ 0.06	508	129	16 Tauri
100 14 24.1	56.3	3	11.75	0.345	— 0.73	515	134	23 Eridani, δ
66 19 46.5	58.8	5	— 11.75	+ 0.424	+ 0.74	509	130	17 Tauri

416. This star is denoted γ Camelopardali on the authority of Mr. Baily. (See his note in the B.A.C.)

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
421	6.6	4	18 Tauri	3 36 48.77	56.4	2	+ 3.564	+ 0.0182	- 0.002
422	...	...	19 Tauri	3 36 53	...	...	3.556	+ 0.0181	- 0.002
423	7.2	4	Piazzi iii. 139	3 37 33.18	56.7	3	3.527	+ 0.0173	.....
424	6.7	2	Piazzi iii. 147	3 38 39.20	57.6	3	3.560	+ 0.0181	.....
425	7.0	4	24 Tauri	3 39 2.14	55.9	6	3.551	+ 0.0177	- 0.001
426	3.0*	...	25 Tauri, η	3 39 10.07	57.6	16	3.551	+ 0.0177	- 0.001
427	5.0	5	26 Eridani, π	3 39 31.63	58.7	3	2.829	+ 0.0049	.....
428	7.3?	0.5	26 Tauri	3 40 38	...	...	3.548	+ 0.0175	.....
429	4.0*	...	27 Eridani, τ^6	3 40 49.53	55.0	2	2.591	+ 0.0031	- 0.011
430	...	...	27 Tauri	3 40 50.57	57.9	7	3.552	+ 0.0176	- 0.001
431	5.7	4	28 Tauri	3 40 52	...	...	3.554	+ 0.0176	- 0.002
432	...	...	W.B. (2) III. 903 ...	3 41 1.57	61.0	1	3.560	+ 0.0178	.....
433	7.8	1.5	Piazzi iii. 164	3 41 36.46	57.0	2	3.560	+ 0.0177	.....
434	6.0	4	Piazzi iii. 170	3 41 54.30	58.3	4	3.589	+ 0.0184	.....
435	...	...	31 Tauri, u^2	3 44 32.48	60.5	2	3.191	+ 0.0097	.....
436	7.4	5.5	Bradley 536	3 45 2.34	57.3	4	3.042	+ 0.0075	.....
437	5.7	2	30 Eridani	3 45 46.88	59.0	2	2.959	+ 0.0064	.....
438	5.5	2	43 Persei, A	3 46 12.82	56.0	5	4.415	+ 0.0446	.....
439	7.5	3	32 Eridani (1st star)	3 47 15.59	58.0	4	3.006	+ 0.0070	.....
440	5.0	1	32 Eridani (2nd star)	3 47 15.85	61.0	1	3.006	+ 0.0070	+ 0.002
441	5.5	1.5	33 Eridani, τ^8	3 47 45.27	59.3	4	2.549	+ 0.0031	.....
442	6.0*	...	Lacaille 1273	3 48 30.53	57.5	2	2.472	+ 0.0027	.....
443	7.0	5	Bradley 544	3 49 56.57	58.0	3	2.791	+ 0.0046	- 0.002
444	3.0*	...	34 Eridani, γ^1	3 51 29.96	57.9	16	2.792	+ 0.0047	+ 0.002
445	Var.	...	35 Tauri, λ	3 52 55.69	57.0	3	3.316	+ 0.0115	- 0.002
446	6.6	12	Groombridge 750	3 53 47.49	56.8	18	16.583	+ 1.8211	.....
447	...	...	36 Eridani, τ^9	3 53 57	...	...	2.555	+ 0.0032	.....
448	8.1	2	Lalande 7441	3 54 36	...	...	3.872	+ 0.0238	.....
449	8.2	2	Lalande 7443	3 54 40	...	...	3.868	+ 0.0239	.....
450	5.0	3	38 Tauri, ν	3 55 42.70	57.7	4	3.184	+ 0.0092	- 0.001
451	6.1	4	Groombridge 766	3 56 9.66	57.0	5	13.062	+ 1.0085	.....
452	4.8	3	37 Tauri, A ¹	3 56 25.49	57.8	5	3.529	+ 0.0154	+ 0.004
453	...	...	Lalande 7511	3 56 37.72	61.0	4	3.663	+ 0.0183	.....
454	5.8	1.5	39 Tauri, A ²	3 57 3.25	57.7	3	3.528	+ 0.0153	+ 0.009
455	6.0	1	41 Tauri	3 58 1.57	61.0	1	+ 3.664	+ 0.0181	+ 0.001

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
0 1 "	1800+		"	"	"			
65 36 9.9	57.5	2	— 11.73	+ 0.426	.....	510	131	18 Tauri
65 58 29.6	58.0	1	11.73	0.426	+ 0.06	511	132	19 Tauri
67 17 37.0	59.0	2	11.68	0.423	.....	...	139	Piazzi iii. 139
65 55 0.5	55.0	1	11.60	0.428	.....	...	147	Piazzi iii. 147
66 19 11.7	59.7	3	11.57	0.428	.....	520	150	24 Tauri
66 19 50.6	56.4	9	11.56	0.428	+ 0.06	521	152	25 Tauri, η
102 32 37.1	61.5	2	11.54	0.343	.....	526	154	26 Eridani, π
66 34 29.6	61.0	1	11.46	0.430	.....	525	156	26 Tauri
113 39 57.9	59.0	3	11.44	0.315	+ 0.55	530	168	27 Eridani, τ^6
66 22 40.2	60.0	6	11.44	0.430	+ 0.07	527	157	27 Tauri
66 17 39.9	59.8	5	11.44	0.431	+ 0.06	528	158	28 Tauri
66 3	...	...	11.43	0.432	.....	...	...	W.B. (2) III. 903
66 4 47.0	61.0	1	11.39	0.432	.....	...	164	Piazzi iii. 164
64 50 44.7	58.1	2	11.37	0.436	.....	...	170	Piazzi iii. 170
83 53	...	...	11.17	0.392	.....	535	184	31 Tauri, u^2
91 34 16.9	56.6	7	11.14	0.374	+ 0.04	536	...	Bradley 536
95 46 56.8	57.5	4	11.08	0.364	.....	538	191	30 Eridani
39 42 50.7	56.0	3	11.06	0.542	.....	533	188	43 Persei, A
93 22 11.3	57.7	3	10.98	0.372	.....	...	...	32 Eridani (1st star)
93 22 18.4	59.5	4	10.98	0.372	+ 0.01	540	195	32 Eridani (2nd star)
115 1 46.1	61.9	1	10.94	0.316	.....	543	198	33 Eridani, τ^8
118 5 7.5	57.4	5	10.89	0.307	.....	...	...	Lacaille 1273
104 0 26.2	57.7	3	10.78	0.348	.....	544	205	Bradley 544
103 54 35.3	56.4	4	10.67	0.349	+ 0.12	546	210	34 Eridani, γ^1
77 54 29.3	57.0	4	10.56	0.416	+ 0.02	548	218	35 Tauri, λ
4 49 15.4	56.1	4	10.52	2.065	.....	...	...	Groombridge 750
114 24 57.2	59.8	4	10.48	0.322	.....	551	221	36 Eridani, τ^9
54 59 41.8	61.0	3	10.43	0.487	.....	...	...	Lalande 7441
55 4 6.7	61.0	4	10.49	0.485	.....	...	...	Lalande 7443
84 24 6.7	57.6	4	10.35	0.402	+ 0.02	553	228	38 Tauri, ν
6 32 48.5	57.4	3	10.32	1.638	.....	...	...	Groombridge 766
68 18	...	...	10.30	0.446	+ 0.09	554	232	37 Tauri, A^1
62 46	...	...	10.28	0.463	.....	...	...	Lalande 7511
68 22 19.3	57.0	4	10.25	0.446	+ 0.14	556	236	39 Tauri, A^2
62 46 50.7	57.5	2	— 10.18	+ 0.465	+ 0.07	558	243	41 Tauri

449. Lalande 7443. The N.P.D. of Lalande, reduced to 1860, is $55^\circ 2' 40''$.

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.			Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h.	m.	s.	1800+		s.	s.	s.
456	8.8	1.5	*	3	58	7.69	59.0	1	+ 3.480	+ 0.0142	.....
457	7.6	2	Piazzi iii. 242	3	58	14.96	54.5	2	3.963	+ 0.0257	.....
458	6.5	5	49 Persei	3	59	0.70	56.8	5	3.954	+ 0.0253	.....
459	5.8	1	50 Persei	3	59	17.14	54.7	3	3.965	+ 0.0255	.....
460	6.2	1.5	Piazzi iii. 251	3	59	51.34	57.5	4	2.456	+ 0.0029	.....
461	6.0	2.5	43 Tauri, ω^1	4	1	0.88	58.3	7	3.477	+ 0.0139	+ 0.007
462	...	...	37 Eridani	4	3	32.90	61.0	2	2.923	+ 0.0058	- 0.002
463	6.4	3	45 Tauri	4	3	53.27	56.3	4	3.177	+ 0.0088	.....
464	10.4	8	*	4	4	1.37	57.4	5	3.341	+ 0.0112	.....
465	6.3	5	Piazzi iii. 260	4	4	35.04	57.0	5	5.228	+ 0.0706	.....
466	4.2	2	38 Eridani, ϕ^1	4	5	1.96	58.3	7	2.924	+ 0.0058	.....
467	6.2	2	Lalande 7905	4	6	31.77	61.1	2	3.041	+ 0.0069	.....
468	7.8	4	*	4	6	38.77	58.1	2	4.309	+ 0.0337	.....
469	7.4	2	Lalande 7912	4	6	50.37	61.1	1	2.848	+ 0.0051	.....
470	5.0	1	39 Eridani, A	4	7	44.20	57.8	4	2.851	+ 0.0051	.....
471	6.4	1	48 Tauri	4	7	49.62	58.0	3	3.389	+ 0.0117	+ 0.008
472	6.0*	...	Lacaille 1388	4	8	30.24	57.0	3	2.376	+ 0.0031	.....
473	4.9	1	40 Eridani, ϕ^2	4	8	49.76	58.3	3	2.908	+ 0.0056	- 0.148
474	...	...	50 Tauri, ω^2	4	9	3.55	58.1	1	3.508	+ 0.0137	- 0.004
475	8.5	1	Redhill 611	4	9	18.50	60.0	2	17.729	+ 1.8127	.....
476	5.9	7	Piazzi iv. 22	4	9	38.53	56.6	5	5.158	+ 0.0641	.....
477	6.4	5	51 Tauri	4	10	6.34	56.9	5	3.533	+ 0.0140	+ 0.009
478	5.0	3	52 Tauri, ϕ	4	11	44.92	58.0	5	3.679	+ 0.0166	- 0.006
479	4.0*	...	54 Tauri, γ	4	11	49.80	55.6	5	3.398	+ 0.0115	+ 0.009
480	7.5	2	55 Tauri	4	11	54.20	57.7	3	3.417	+ 0.0118	+ 0.008
481	5.9	2	57 Tauri, h	4	12	4.81	58.0	3	3.362	+ 0.0110	.....
482	5.9	2	58 Tauri	4	12	40.11	58.8	4	3.386	+ 0.0113	.....
483	6.4	4	Bradley 587	4	13	0.43	57.7	5	3.359	+ 0.0108	.....
484	7.3	3	Piazzi iv. 47	4	13	16.23	59.4	3	3.524	+ 0.0135	.....
485	6.7	1	Piazzi iv. 53	4	14	8.99	59.0	2	3.519	+ 0.0133	.....
486	6.2	5.5	60 Tauri	4	14	10.29	56.9	5	3.364	+ 0.0109	.....
487	4.0*	...	61 Tauri, δ^1	4	14	51.88	56.5	6	3.443	+ 0.0120	+ 0.004
488	7.6	8	Bradley 592	4	15	3.04	57.3	6	3.608	+ 0.0149	+ 0.004
489	8.3	1	W.B. (2) IV. 309-10...	4	15	16	...	...	3.522	+ 0.0133	.....
490	...	...	Lalande 8195	4	15	17.61	61.1	1	+ 3.524	+ 0.0133	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. in N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
0 1 "	1800+		"	"	"			
70 30 31.1	58.0	1	- 10.17	+ 0.441	.....	...	...	*
52 17 52.2	58.0	2	10.16	0.503	.....	...	242	Piazzi iii. 242
52 38 37.4	57.0	3	10.10	0.503	.....	560	247	49 Persei
52 19 49.5	57.3	4	10.08	0.505	.....	561	248	50 Persei
118 2 15.5	58.3	5	10.04	0.315	.....	...	251	Piazzi iii. 251
70 45 50.9	56.7	5	9.95	0.445	+ 0.05	562	252	43 Tauri, ω^1
97 17 35.6	61.1	2	9.76	0.377	+ 0.04	567	3	37 Eridani
84 50 39.9	56.6	4	9.73	0.409	.....	566	4	45 Tauri
77 3 35.0	57.4	3	9.73	0.430	.....	...	...	*
28 30 25.3	57.6	5	9.68	0.672	.....	...	260	Piazzi iii. 260
97 12 20.6	59.5	6	9.64	0.378	.....	568	11	38 Eridani, ϕ^1
91 30 32.9	61.1	2	9.53	0.394	.....	...	...	Lalande 7905
43 34 32.6	58.6	2	9.52	0.557	.....	...	...	*
100 44 46.8	61.9	3	9.51	0.370	.....	...	...	Lalande 7912
100 36 24.6	56.3	4	9.43	0.371	.....	574	26	39 Eridani, A
74 57 9.6	56.9	6	9.43	0.440	+ 0.02	572	21	48 Tauri
120 28	...	...	9.38	0.311	.....	...	...	Lacaille 1388
97 52 24.4	57.3	4	9.35	0.379	+ 3.46	578	29	40 Eridani, ϕ^2
69 46 8.4	58.0	3	9.34	0.457	+ 0.05	575	27	50 Tauri, ω^2
4 37	...	...	9.32	2.294	.....	...	...	Redhill 611
29 36 9.3	57.7	3	9.29	0.671	.....	...	22	Piazzi iv. 22
68 45 57.9	58.4	3	9.25	0.461	+ 0.05	576	32	51 Tauri
62 59 16.3	61.1	3	9.13	0.482	+ 0.07	582	38	52 Tauri, ϕ
74 42 50.3	56.7	6	9.12	0.445	+ 0.03	583	39	54 Tauri, γ
73 49 8.6	58.0	1	9.11	0.447	.....	584	40	55 Tauri
76 18 22.4	58.7	3	9.10	0.440	.....	585	41	57 Tauri, h
75 14 38.0	57.1	3	9.05	0.444	.....	586	43	58 Tauri
76 28 26.6	59.0	3	9.03	0.441	.....	587	45	Bradley 587
69 17 46.3	58.4	3	9.01	0.462	.....	...	47	Piazzi iv. 47
69 30 45.7	59.7	3	8.93	0.463	.....	...	53	Piazzi iv. 53
76 15 27.3	58.7	3	8.93	0.443	.....	589	54	60 Tauri
72 47 19.8	56.9	8	8.88	0.454	+ 0.03	594	57	61 Tauri, δ^1
65 55 28.1	57.3	4	8.86	0.476		592	...	Bradley 592
69 26 45.3	62.0	1	8.85	0.465		...	...	W.B. (2) IV. 309-10
69 21	...	...	- 8.85	+ 0.465		...	...	Lalande 8195

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				h.	m.	s.	1800+		s.	s.	s.
491	7.4	2	Lalande 8198	4	15	23	...	...	+ 3.572	+ 0.0141	
492	6.0	2	63 Tauri	4	15	23.33	59.0	2	3.426	+ 0.0116	
493	5.0	1	64 Tauri, δ^2	4	16	1.75	57.0	4	3.442	+ 0.0119	+ 0.007
494	9.0	1	W.B. (1) IV. 329 ...	4	16	41	...	...	3.263	+ 0.0092	.....
495	6.0	1	B. F. 548	4	16	48	...	...	3.479	+ 0.0124	.....
496	6.4	2	67 Tauri, κ^2	4	17	4.86	58.3	4	3.556	+ 0.0136	.....
497	4.7	1	68 Tauri, δ^3	4	17	23.52	57.5	2	3.454	+ 0.0119	.....
498	7.3	1	70 Tauri	4	17	38	...	...	3.409	+ 0.0113	.....
499	4.8	1	69 Tauri, ν^1	4	17	56.08	57.3	3	3.572	+ 0.0138	+ 0.007
500	8.0	1	Piazzi iv. 76	4	18	0.85	57.0	1	3.539	+ 0.0132	.....
501	...	...	71 Tauri	4	18	22	...	...	3.402	+ 0.0110	+ 0.005
502	3.7*	...	74 Tauri, ϵ	4	20	26.70	57.4	9	3.487	+ 0.0121	+ 0.005
503	6.9	4	76 Tauri	4	20	27.75	57.5	2	3.384	+ 0.0106	.....
504	Var.	...	Tauri (R.) var. ...	4	20	37.83	56.7	5	3.283	+ 0.0092	.....
505	4.3*	...	78 Tauri, θ^2	4	20	40.35	58.0	2	3.410	+ 0.0110	+ 0.007
506	5.8	4	79 Tauri, b	4	20	59.72	58.7	3	3.346	+ 0.0101	.....
507	8.0	4	Piazzi iv. 59	4	21	42.08	57.5	4	10.154	+ 0.3837	.....
508	...	...	80 Tauri	4	22	10	...	...	3.405	+ 0.0108	+ 0.005
509	5.0*	...	Bradley 619	4	22	33.21	56.0	1	3.418	+ 0.0109	.....
510	7.0	1	Piazzi iv. 96	4	22	39.01	57.1	1	3.971	+ 0.0209	.....
511	6.0?*	...	81 Tauri	4	22	39.91	57.0	1	3.407	+ 0.0108	+ 0.009
512	6.1	5	83 Tauri	4	22	44.63	58.3	4	3.362	+ 0.0101	.....
513	6.5	1	Bradley 616	4	23	34	...	...	4.201	+ 0.0258	.....
514	6.0	1	57 Persei, m	4	23	34	...	...	4.201	+ 0.0258	- 0.001
515	8.1	4	Piazzi iv. 77	4	24	39.49	57.4	5	10.284	+ 0.4086	.....
516	5.9	3	45 Eridani	4	24	43.06	59.0	5	3.065	+ 0.0066	- 0.002
517	6.0*	...	Piazzi iv. 115	4	24	53.73	57.0	2	2.345	+ 0.0032	.....
518	7.0	2	Piazzi iv. 111	4	25	52.72	57.0	3	3.742	+ 0.0158	.....
519	5.0*	...	86 Tauri, ρ	4	25	54.42	57.7	5	3.390	+ 0.0102	+ 0.008
520	7.2	2	Piazzi iv. 116	4	25	55.19	59.0	2	3.354	+ 0.0097	.....
521	8.1	3	Piazzi iv. 119	4	27	27.42	57.9	1	3.512	+ 0.0118	.....
522	7.3	1	Piazzi iv. 120	4	27	30	...	...	3.509	+ 0.0118	.....
523	1.0*	...	87 Tauri, α	4	27	53.43	57.4	19	3.430	+ 0.0106	+ 0.004
524	4.0*	...	50 Eridani, ν^6	4	28	1.27	57.0	2	2.360	+ 0.0033	- 0.010
525	6.4	6	Piazzi iv. 112	4	30	3.94	57.6	5	+ 7.911	+ 0.1901	

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° ' "	1800+		"	"	"			
67 21 54.7	60.0	2	— 8.84	+ 0.472		...	...	Lalande 8198
73 33 12.3	56.7	3	8.83	0.453		596	62	63 Tauri
72 53 1.6	58.0	6	8.79	0.455	+ 0.04	597	64	64 Tauri, δ^2
80 58 38.2	57.1	1	8.74	0.432	.....	...	...	W.B. (1) IV. 329
71 16 57.2	59.1	1	8.72	0.461	.....	...	...	B.F. 548
68 7 22.4	57.0	1	8.70	0.471	.....	600	71	67 Tauri, κ^2
72 23 45.1	54.6	2	8.69	0.458	.....	601	73	68 Tauri, δ^3
74 22 56.3	59.1	1	8.66	0.453	.....	603	74	70 Tauri
67 30 26.7	58.0	3	8.64	0.474	+ 0.05	604	75	69 Tauri, ν^1
68 51	...	...	8.63	0.470	.....	...	76	Piazzi iv. 76
74 42 10.5	61.0	1	8.60	0.452	+ 0.04	605	78	71 Tauri
71 7 58.6	56.6	4	8.44	0.465	+ 0.03	609	87	74 Tauri, ϵ
75 34 26.8	58.1	3	8.43	0.452	.....	611	89	76 Tauri
80 9	...	...	8.43	0.439	.....	...	...	Tauri (R.) var.
74 26 34.1	58.5	4	8.42	0.456	+ 0.02	613	91	78 Tauri, θ^2
77 15 55.8	56.0	4	8.39	0.447	.....	614	93	79 Tauri, b
9 44 31.3	58.0	3	8.34	1.351	.....	...	59	Piazzi iv. 59
74 40 19.7	61.0	1	8.30	0.456	+ 0.01	617	97	80 Tauri
74 6 51.2	56.5	5	8.27	0.458	+ 0.04	619	99	Bradley 619
53 33 42.0	57.6	4	8.27	0.532	.....	...	96	Piazzi iv. 96
74 36 58.5	59.0	4	8.26	0.456	+ 0.01	620	100	81 Tauri
76 34 59.9	59.4	4	8.25	0.450	.....	621	103	83 Tauri
47 16 7.9	60.5	2	8.19	0.563	.....	616	101	Bradley 616
47 14 19.9	59.5	2	8.19	0.563	+ 0.03	618	104	57 Persei, m
9 38	...	...	8.10	1.375	.....	...	77	Piazzi iv. 77
90 20 49.3	57.1	1	8.10	0.412	+ 0.02	624	110	45 Eridani
120 45 2.5	59.1	1	8.09	0.316	.....	...	115	Piazzi iv. 115
61 20 5.4	56.7	3	8.01	0.503	.....	...	111	Piazzi iv. 111
75 27 12.2	57.8	4	8.00	0.457	+ 0.04	627	114	86 Tauri, ρ
77 2 46.9	60.0	2	8.00	0.452	.....	...	116	Piazzi iv. 116
70 19 20.6	59.5	5	7.88	0.474	.....	...	119	Piazzi iv. 119
70 24 38.1	60.3	4	7.87	0.474	.....	...	120	Piazzi iv. 120
73 46 31.6	57.1	11	7.85	0.464	+ 0.17	630	125	87 Tauri, α
120 3 5.6	54.9	4	7.84	0.320	+ 0.28	636	130	50 Eridani, ν^6
14 19 20.7	57.4	5	— 7.67	+ 1.069		...	112	Piazzi iv. 112

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				h. m. s.	1800+		s.	s.	s.
526	6.8	3.5	89 Tauri	4 30 8.80	57.0	3	+ 3.420	+ 0.0103	
527	4.8	2	90 Tauri, ϵ^1	4 30 20.14	57.0	4	3.340	+ 0.0092	
528	5.3	1	92 Tauri, σ^2	4 31 16.22	56.4	5	3.418	+ 0.0101	.....
529	4.4	1	53 Eridani	4 31 46.15	58.0	6	2.750	+ 0.0043	- 0.006
530	8.1	8.5	Radcliffe 1272	4 31 54.21	56.5	14	21.172	+ 2.0893	.....
531	7.6	1	*	4 32 12.82	58.0	1	2.743	+ 0.0041	.....
532	6.3	4	Bradley 650	4 32 53.51	58.5	4	2.748	+ 0.0042	+ 0.006
533	8.0	5	Tauri, τ^1	4 33 48.37	58.0	5	3.592	+ 0.0122	0.000
534	5.0	4	94 Tauri, τ^2	4 33 50.78	60.3	6	3.592	+ 0.0122	.....
535	6.5	1.5	Piazzi iv. 167	4 34 17.52	58.8	4	2.499	+ 0.0034	.....
536	5.0*	...	54 Eridani	4 34 19.09	57.0	2	2.621	+ 0.0036	0.000
537	5.6	2	4 Camelopardali	4 36 21.46	58.4	5	4.959	+ 0.0416	+ 0.002
538	...	...	57 Eridani, μ	4 38 30.26	60.6	6	2.995	+ 0.0056	+ 0.002
539	6.0*	...	Lacaille 1569	4 38 37.41	58.0	3	2.410	+ 0.0033	.....
540	7.4	7	Piazzi iv. 189	4 39 50.10	57.8	4	3.194	+ 0.0070	.....
541	7.4	7	Piazzi iv. 190	4 40 30.59	58.3	5	3.492	+ 0.0102	.....
542	6.0	3	58 Eridani	4 41 19.23	57.7	5	2.683	+ 0.0039	.....
543	4.0*	...	1 Orionis, π^1	4 42 14.52	57.3	5	3.221	+ 0.0072	+ 0.033
544	6.7	11.5	Radcliffe 1311	4 42 40.75	56.5	15	20.102	+ 1.6123	.....
545	7.3	3.5	Bradley 661	4 42 58.13	58.6	2	4.003	+ 0.0173	.....
546	4.7*	...	2 Orionis, π^2	4 42 59.04	59.7	3	3.264	+ 0.0076	.....
547	5.5	1	97 Tauri, i	4 43 10.98	61.1	1	3.497	+ 0.0100	+ 0.003
548	...	...	2 Aurigæ	4 43 16.09	61.0	1	4.005	+ 0.0173	.....
549	6.0	2	60 Eridani	4 43 53.13	57.5	2	2.699	+ 0.0039	.....
550	6.4	4.5	Piazzi iv. 191	4 44 37.68	57.3	5	7.498	+ 0.1571	.....
551	8.4	9	Radcliffe 1329	4 46 44.33	56.8	8	19.365	+ 1.3997	.....
552	6.7	6	Piazzi iv. 207	4 47 3.76	57.6	4	7.458	+ 0.1281	.....
553	4.8	1	7 Orionis, π^4	4 47 11.53	56.5	5	3.294	+ 0.0076	.....
554	3.0*	...	3 Aurigæ, ι	4 47 52.85	58.0	7	3.896	+ 0.0147	- 0.003
555	6.7	7	Bradley, 671	4 48 40.75	57.7	3	6.016	+ 0.0668	.....
556	6.0	1	62 Eridani, b	4 49 30.60	59.8	3	2.952	+ 0.0049	- 0.001
557	6.3	0.5	Lacaille 1648	4 49 46.51	58.0	3	2.451	+ 0.0032	.....
558	8.4	3	Piazzi iv. 258	4 50 50.59	59.0	2	3.104	+ 0.0058	.....
559	7.0	3	101 Tauri	4 51 42.42	58.4	3	3.431	+ 0.0085	
560	Var.	...	7 Aurigæ, ϵ	4 51 55.75	57.7	3	+ 4.290	+ 0.0201	0.000

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° ' "	1800+		"	"	"			
74 15 3.1	57.7	5	— 7.66	+ 0.464		638	135	89 Tauri
77 46 25.0	58.1	4	7.64	0.454		639	138	90 Tauri, c^1
74 21 46.1	58.2	4	7.57	0.465	.....	643	145	92 Tauri, σ^2
104 34 51.5	56.1	4	7.53	0.374	+ 0.19	647	150	53 Eridani
3 55 3.3	57.8	2	7.52	2.865	.....	...	...	Radcliffe 1272
104 52 34.3	59.0	1	7.49	0.374	.....	...	...	*
104 38 0.6	59.0	2	7.44	0.375	+ 0.14	650	157	Bradley 650
67 19 45.9	57.4	3	7.36	0.491	+ 0.02	...	...	Tauri, τ^1
67 18 54.6	58.8	4	7.36	0.491	.....	648	159	94 Tauri, τ^2
114 45 32.9	57.4	3	7.33	0.342	+ 0.12	...	167	Piazzi iv. 167
109 56 33.7	56.6	4	7.33	0.358	+ 0.11	653	166	54 Eridani
33 29 48.8	57.6	5	7.16	0.679	+ 0.17	649	164	4 Camelopardali
93 30 51.9	57.5	4	6.98	0.413	+ 0.01	657	183	57 Eridani, μ
117 50 20.8	57.1	4	6.97	0.333	.....	...	...	Lacaille 1569
84 27 58.5	57.1	3	6.87	0.441	.....	...	189	Piazzi iv. 189
71 31 36.2	55.5	5	6.82	0.482	.....	...	190	Piazzi iv. 190
107 11 37.2	57.6	2	6.75	0.372	.....	664	198	58 Eridani
83 17 12.0	57.2	6	6.67	0.446	+ 0.01	663	201	1 Orionis, π^1
4 14 15.2	56.5	1	6.64	2.769	.....	...	...	Radcliffe 1311
53 35 53.9	58.4	6	6.61	0.554	.....	661	200	Bradley 661
81 20 37.5	58.6	2	6.62	0.452	+ 0.04	667	209	2 Orionis, π^2
71 24 6.3	61.1	1	6.60	0.485	+ 0.07	666	208	97 Tauri, i
53 32 14.7	61.1	2	6.59	0.555	.....	662	203	2 Aurigæ
106 27 49.0	60.4	3	6.54	0.375	.....	673	215	60 Eridani
15 57 20.2	57.5	5	6.48	1.038	.....	...	191	Piazzi iv. 191
4 27 16.0	57.0	3	6.31	2.684	.....	...	...	Radcliffe 1329
16 8 51.5	57.3	5	6.27	1.036	.....	...	207	Piazzi iv. 207
80 4 29.7	56.6	6	6.26	0.460	.....	679	234	7 Orionis, π^4
57 3 33.2	57.6	7	6.21	0.544	+ 0.02	677	235	3 Aurigæ, ι
23 22 46.8	57.6	5	6.14	0.838	.....	671	...	Bradley 671
95 23 46.6	58.1	1	6.07	0.413	.....	689	250	62 Eridani, b
115 57 16.7	56.1	4	6.05	0.344	.....	...	...	Lacaille 1648
88 32 40.1	57.3	3	5.96	0.435	.....	...	258	Piazzi iv. 258
74 17 54.4	58.0	4	5.89	0.482		694	261	101 Tauri
46 23 18.2	58.3	4	— 5.87	+ 0.601	0.00	690	256	7 Aurigæ, ϵ

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				h. m. s.	1800+		s.	s.	s.
561	7.8	3	*	4 52 13.89	58.1	3	+ 2.729	+ 0.0038	
562	7.0	5	Piazzi iv. 266	4 52 37.47	59.0	2	3.395	+ 0.0081	
563	5.8	1.5	63 Eridani	4 53 13.02	58.4	3	2.835	+ 0.0042	- 0.003
564	Var.	...	Leporis (R.) var....	4 53 14.10	57.6	7	2.728	+ 0.0038	.....
565	5.6	2	64 Eridani	4 53 25.60	58.7	3	2.782	+ 0.0040	.....
566	5.0*	...	102 Tauri, ι	4 54 43.86	54.8	5	3.575	+ 0.0095	+ 0.004
567	5.9	3	Piazzi iv. 254	4 54 45.49	57.1	2	7.477	+ 0.1148	.....
568	6.5	3	Piazzi iv. 253	4 54 56.12	57.0	1	8.332	+ 0.1515	.....
569	5.0*	...	9 Aurigæ	4 55 43.43	57.1	3	4.682	+ 0.0262	.....
570	...	...	11 Orionis.....	4 56 34.42	61.0	1	3.422	+ 0.0079	0.000
571	7.0	18	Radcliffe 1377	4 56 42.15	56.7	16	19.539	+ 1.2206	.....
572	...	...	1 Leporis	4 56 50.65	58.0	2	2.525	+ 0.0032	.....
573	5.6	2	104 Tauri, m	4 59 10.69	54.7	6	3.503	+ 0.0084	+ 0.040
574	3.7*	...	2 Leporis, ϵ	4 59 32.20	58.3	7	2.536	+ 0.0033	0.000
575	5.2	3	Piazzi iv. 269	4 59 34.16	56.9	5	9.749	+ 0.2176	.....
576	6.7	5	13 Orionis	4 59 58.21	57.7	5	3.284	+ 0.0066	.....
577	3.0*	...	67 Eridani, β	5 0 58.13	57.8	5	2.953	+ 0.0045	- 0.006
578	6.1	4	16 Orionis, h	5 1 37.58	58.3	3	3.292	+ 0.0065	.....
579	...	...	69 Eridani, λ	5 2 26.88	59.0	4	2.868	+ 0.0041	+ 0.002
580	7.1	2	12 Aurigæ.....	5 6 5.32	57.8	3	4.430	+ 0.0181	.....
581	...	...	Lacaille 1747	5 6 6.38	57.1	1	2.309	+ 0.0031	.....
582	1.0*	...	13 Aurigæ, α	5 6 21.06	59.0	10	4.412	+ 0.0176	+ 0.008
583	3.0	1	5 Leporis, μ	5 6 38.77	58.1	2	2.689	+ 0.0034	- 0.003
584	7.2	7	Piazzi iv. 311	5 6 54.12	57.4	5	9.280	+ 0.1674	.....
585	7.5	1	Oeltz. Arg. (N.Z.) 5693	5 7 29	...	...	4.419	+ 0.0174	.....
586	1.0*	...	19 Orionis, β	5 7 48.62	57.6	11	2.880	+ 0.0040	- 0.001
587	5.3	3	16 Aurigæ.....	5 8 59.59	58.1	3	3.926	+ 0.0111	.....
588	5.3	2	15 Aurigæ, λ	5 9 17.73	56.7	5	4.165	+ 0.0136	+ 0.043
589	3.7	1	20 Orionis, τ	5 10 48.67	59.6	2	2.911	+ 0.0040	+ 0.001
590	6.0	1	109 Tauri, n	5 10 52.08	61.1	1	3.599	+ 0.0078	+ 0.001
591	...	...	Columbæ, σ	5 12 26.35	57.6	4	2.154	+ 0.0032	.....
592	8.0	7.5	Piazzi v. 61	5 14 44.05	57.2	6	3.151	+ 0.0047	.....
593	5.8	3	Piazzi v. 70	5 16 1.59	57.1	3	2.462	+ 0.0030	.....
594	5.9	6	111 Tauri	5 16 15.30	57.6	4	3.480	+ 0.0064	
595	6.6	3	Bradley 757	5 16 44.23	59.0	3	+ 3.049	+ 0.0042	

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° ' "	1800+		"	"	"			
105 0	...	...	— 5.84	+ 0.384		...	...	*
75 49 51.7	60.0	4	5.81	0.477		...	266	Piazziv. 266
100 28 18.9	60.1	6	5.76	0.399	0.00	697	271	63 Eridani
105 1 12.8	57.3	5	5.76	0.383	.....	...	...	Leporis (R.) var.
102 44 49.3	57.6	2	5.74	0.391	.....	699	272	64 Eridani
68 36 47.5	55.8	5	5.64	0.503	+ 0.06	698	274	102 Tauri, ϵ
16 14 37.1	57.6	2	5.63	1.049	.....	...	254	Piazziv. 254
13 42 47.7	57.9	4	5.62	1.169	.....	...	253	Piazziv. 253
38 35 35.0	56.7	4	5.55	0.659	.....	696	273	9 Aurigæ
74 47 42.7	58.1	1	5.48	0.482	+ 0.03	702	286	11 Orionis
4 28 0.7	58.0	4	5.47	2.744	.....	...	...	Radcliffe 1377
112 59 56.3	60.6	4	5.45	0.357	.....	704	290	1 Leporis
71 32 47.5	56.1	5	5.26	0.495	— 0.02	705	293	104 Tauri, m
112 33 42.5	58.5	6	5.23	0.359	+ 0.07	713	303	2 Leporis, ϵ
10 56 26.5	56.3	6	5.23	1.375	.....	...	269	Piazziv. 269
80 42 8.7	58.0	3	5.19	0.465	.....	709	300	13 Orionis
95 16 13.8	55.1	4	5.11	0.418	+ 0.08	715	312	67 Eridani, β
80 21 14.7	57.8	4	5.05	0.467	.....	716	314	16 Orionis, h
98 56 13.7	58.5	4	4.98	0.407	+ 0.03	720	323	69 Eridani, λ
43 44 54.2	58.2	5	4.68	0.630	.....	721	5	12 Aurigæ
120 23 55.0	59.8	4	4.68	0.329	.....	...	...	Lacaille 1747
44 8 57.2	57.7	9	4.65	0.628	+ 0.43	722	6	13 Aurigæ, α
106 22 26.7	58.0	4	4.63	0.383	+ 0.02	732	16	5 Leporis, μ
11 50 20.6	57.9	6	4.61	1.319	.....	...	311	Piazziv. 311
44 1 53.7	57.1	3	4.55	0.630	.....	...	...	Oeltz. Arg. (N.Z.) 5693
98 21 59.2	56.3	9	4.53	0.411	+ 0.02	736	18	19 Orionis, β
56 46 42.7	57.7	3	4.42	0.561	.....	733	21	16 Aurigæ
50 1 47.3	57.7	3	4.40	0.595	+ 0.70	731	22	15 Aurigæ, λ
96 59 55.6	57.8	4	4.27	0.417	+ 0.03	742	40	20 Orionis, τ
68 3 7.7	58.0	2	4.27	0.515	— 0.03	741	34	109 Orionis, n
125 2	...	...	4.13	0.309	.....	...	51	Columbæ, σ
86 34 9.2	56.2	7	3.94	0.452	.....	...	61	Piazziv. 61
114 54 42.0	55.4	5	3.82	0.354		...	70	Piazziv. 70
72 45 0.8	56.6	6	3.81	0.500		754	66	111 Tauri
91 0 4.3	57.6	4	— 3.77	+ 0.438		757	...	Bradley 757

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				h. m. s.	1800+		s.	s.	s.
596	4.7	3	29 Orionis, <i>e</i>	5 17 12.21	59.7	3	+ 2.888	+ 0.0036	
597	5.5	1	27 Orionis, <i>p</i>	5 17 21.78	56.4	3	3.048	+ 0.0042	
598	...	...	28 Orionis, η	5 17 26.25	57.1	1	3.014	+ 0.0040	— 0.002
599	2.0*	...	112 Tauri, β	5 17 26.69	57.1	7	3.785	+ 0.0083	+ 0.003
600	6.4	5.5	Groombridge 944	5 17 31.58	56.6	8	18.440	+ 0.7062	.....
601	...	...	Lacaille 1823	5 17 34.28	57.1	1	2.407	+ 0.0030	.....
602	2.0*	...	24 Orionis, γ	5 17 37.35	57.3	5	3.215	+ 0.0049	+ 0.002
603	7.6	5	Bradley 772	5 19 11.72	57.6	2	3.137	+ 0.0045	.....
604	6.0*	...	114 Tauri, <i>o</i>	5 19 13.62	55.0	1	3.599	+ 0.0068	.....
605	5.0	1	30 Orionis, ψ^2	5 19 30.23	59.1	3	3.141	+ 0.0044	.....
606	6.0*	...	Piazzi v. 102.....	5 20 33.62	59.0	2	2.791	+ 0.0033	.....
607	7.0	1	18 Camelopardali.....	5 20 34.83	57.1	1	5.109	+ 0.0220	.....
608	6.3	4	Groombridge 966	5 21 1.77	57.8	4	7.970	+ 0.0805	.....
609	6.0*	...	Lacaille 1849	5 21 47.27	56.1	2	2.409	+ 0.0029	.....
610	7.5	7	Groombridge 956	5 21 58.49	57.7	7	18.879	+ 0.6642	.....
611	...	...	Lacaille 1855	5 22 38.26	57.8	3	2.230	+ 0.0030	.....
612	5.5	2	25 Aurigæ, χ	5 23 37.01	60.0	3	3.900	+ 0.0081	+ 0.003
613	8.0	19	Radcliffe 1474	5 24 39.24	56.4	19	31.110	+ 1.8658	.....
614	2.0*	...	34 Orionis, δ	5 24 51.26	57.6	11	3.063	+ 0.0038	+ 0.001
615	4.5	1	36 Orionis, <i>v</i>	5 25 9.48	61.1	1	2.900	+ 0.0033	.....
616	3.0*	...	11 Leporis, α	5 26 33.48	56.6	4	2.644	+ 0.0029	+ 0.001
617	7.1	5	22 Camelopardali	5 27 16.29	57.1	4	5.054	+ 0.0179	.....
618	7.2	6	21 Camelopardali	5 27 30.88	57.0	3	5.546	+ 0.0239	.....
619	7.2	6	41 Orionis, θ^1 (1st star)	5 28 23.33	57.6	5	2.944	+ 0.0033	0.000
620	8.6	4	41 Orionis, θ^1 (2nd star)	5 28 23.56	58.1	3	2.944	+ 0.0033	.....
621	5.5	2	41 Orionis, θ^1 (3rd star)	5 28 23.92	57.7	3	2.944	+ 0.0033	.....
622	7.5	7	41 Orionis, θ^1 (4th star)	5 28 24.76	57.7	5	2.944	+ 0.0033	.....
623	6.0	1	43 Orionis, θ^2 (1st star)	5 28 30.37	61.0	1	2.944	+ 0.0032	+ 0.001
624	7.0	1	43 Orionis, θ^2 (2nd star)	5 28 34.12	61.2	1	2.944	+ 0.0032	.....
625	2.0*	...	46 Orionis, ϵ	5 29 6.60	57.0	8	3.042	+ 0.0036	— 0.002
626	4.7*	...	40 Orionis, ϕ^2	5 29 13.04	56.6	4	3.287	+ 0.0043	+ 0.007
627	3.3*	...	123 Tauri, ζ	5 29 16.69	57.8	7	3.582	+ 0.0055	0.000
628	9.6	2	26 Aurigæ (1st star)...	5 29 37.94	57.1	2	3.850	+ 0.0068	.....
629	5.7	3	26 Aurigæ (2nd star) .	5 29 38.90	57.1	2	3.850	+ 0.0068	— 0.004
630	2.0*	...	50 Orionis, ζ	5 33 41.68	56.4	6	+ 3.025	+ 0.0033	+ 0.002

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
o ' "	1800+		"	"	"			
97 56 25.2	60.0	3	— 3.72	+ 0.416	.....	764	75	29 Orionis, <i>e</i>
91 1 45.1	60.3	4	3.71	0.439	.....	762	76	27 Orionis, <i>p</i>
92 31 44.1	61.1	1	3.70	0.434	+ 0.03	765	81	28 Orionis, <i>η</i>
61 30 51.8	57.1	7	3.70	0.544	+ 0.20	756	72	112 Tauri, <i>β</i>
4 53 17.0	57.2	5	3.70	2.645	.....	...	...	Groombridge 944
116 50 25.7	61.1	2	3.70	0.347	.....	...	...	Lacaille 1823
83 46 50.1	57.6	2	3.69	0.463	+ 0.04	761	80	24 Orionis, <i>γ</i>
87 11 22.3	56.7	3	3.56	0.452	.....	772	...	Bradley 772
68 11 11.5	57.6	4	3.55	0.518	.....	768	88	114 Tauri, <i>ο</i>
87 1 45.4	57.7	3	3.53	0.452	.....	773	91	30 Orionis, <i>ψ</i> ²
102 1 18.6	57.4	3	3.43	0.403	.....	...	102	Piazzi v. 102
32 53 1.8	58.5	2	3.43	0.736	.....	759	85	18 Camelopardali
15 3 28.3	56.9	4	3.39	1.147	.....	...	...	Groombridge 966
116 42 11.6	55.7	3	3.33	0.348	.....	...	...	Lacaille 1849
4 46	...	...	3.31	2.717	.....	...	...	Groombridge 956
122 32	...	...	3.26	0.323	.....	...	...	Lacaille 1855
57 54 56.2	58.7	5	3.17	0.563	— 0.02	776	114	25 Aurigæ, <i>χ</i>
2 41 51.5	57.5	4	3.08	4.484	.....	...	...	Radcliffe 1474
90 24 23.3	56.4	15	3.06	0.443	+ 0.04	787	126	34 Orionis, <i>δ</i>
97 24 29.7	58.4	6	3.04	0.420	.....	789	130	36 Orionis, <i>υ</i>
107 55 30.6	58.1	7	2.92	0.383	0.00	796	139	11 Leporis, <i>α</i>
33 43 33.2	57.7	6	2.86	0.732	.....	785	129	22 Camelopardali
28 8 22.6	57.1	7	2.84	0.803	.....	782	128	21 Camelopardali
95 28 58.7	59.1	7	2.76	0.427	— 0.03	...	...	41 Orionis, <i>θ</i> ¹ (1st star)
95 28 54.2	61.0	2	2.76	0.427	.....	...	...	41 Orionis, <i>θ</i> ¹ (2nd star)
95 29 8.9	59.6	4	2.76	0.427	.....	802	147	41 Orionis, <i>θ</i> ¹ (3rd star)
95 29 1.2	60.4	3	2.76	0.427	.....	...	...	41 Orionis, <i>θ</i> ¹ (4th star)
95 30 42.9	59.6	2	2.75	0.427	0.00	804	150	43 Orionis, <i>θ</i> ² (1st star)
95 30 45.6	61.1	4	2.75	0.427	.....	...	...	43 Orionis, <i>θ</i> ² (2nd star)
91 17 41.7	54.8	7	2.69	0.441	+ 0.01	809	160	46 Orionis, <i>ε</i>
80 47 20.2	55.6	4	2.69	0.476	+ 0.33	805	156	40 Orionis, <i>φ</i> ²
68 56 46.8	56.1	3	2.68	0.519	+ 0.05	800	152	123 Tauri, <i>ζ</i>
59 36	...	...	2.64	0.558	.....	...	...	26 Aurigæ (1st star)
59 35 41.6	57.6	4	2.64	0.558	0.00	799	155	26 Aurigæ (2nd star)
92 1 12.2	56.4	11	— 2.30	+ 0.439	+ 0.03	819	188	50 Orionis, <i>ζ</i>

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				h.	m.	s.	1800+		s.	s.	s.
631	7.6	9.5	Bradley 818	5	34	14.59	56.7	5	+ 3.528	+ 0.0047	
632	2.0*	...	Columbæ, α	5	34	35.06	56.1	5	2.171	+ 0.0028	
633	6.3	5	27 Aurigæ, σ	5	35	3.44	56.3	5	4.642	+ 0.0107	.....
634	...	...	*	5	35	38.92	61.2	1	3.460	+ 0.0042	.....
635	...	...	Piazzi v. 205	5	36	19.94	59.6	2	2.192	+ 0.0027	.....
636	7.5	8	Bradley 824	5	36	31.11	58.6	8	3.429	+ 0.0041	.....
637	7.3	1	128 Tauri, (R.)	5	36	49.35	61.1	6	3.454	+ 0.0041	.....
638	4.0*	...	13 Leporis, γ	5	38	37.78	56.1	4	2.521	+ 0.0026	— 0.023
639	7.2	8	Piazzi v. 214	5	39	20.27	56.7	5	3.683	+ 0.0047	.....
640	8.0	7	Lalande 10912	5	39	22.13	57.5	5	3.682	+ 0.0045	.....
641	2.7*	...	53 Orionis, κ	5	41	7.10	56.3	5	2.844	+ 0.0027	0.000
642	6.7	4	Piazzi v. 237	5	42	18.32	58.5	7	3.908	+ 0.0048	.....
643	6.5	1.5	Piazzi v. 239	5	42	19.98	56.8	3	3.303	+ 0.0033	.....
644	...	...	Lacaille 1998	5	43	13.22	59.6	2	2.190	+ 0.0026	.....
645	6.2	5	137 Tauri	5	44	25.17	59.3	5	3.408	+ 0.0033	0.000
646	5.3	1	136 Tauri	5	44	31.68	57.7	5	3.769	+ 0.0040	— 0.001
647	6.0	0.5	Lacaille 2011	5	44	34.66	57.6	2	2.281	+ 0.0026	.....
648	4.0*	...	15 Leporis, δ	5	45	18.10	58.5	3	2.563	+ 0.0025	+ 0.015
649	...	...	Columbæ, β	5	46	1.70	57.3	4	2.109	+ 0.0026	.....
650	5.0	2	54 Orionis, χ^1	5	46	5.54	58.4	3	3.564	+ 0.0034	— 0.016
651	7.0	1.5	Piazzi v. 246	5	46	17.79	54.1	3	6.215	+ 0.0142	.....
652	Var.	...	58 Orionis, α	5	47	35.58	58.3	13	3.245	+ 0.0028	+ 0.001
653	6.5	5	Piazzi v. 253	5	47	48.05	57.7	5	6.199	+ 0.0136	.....
654	...	...	33 Aurigæ, δ	5	48	0.25	57.8	3	4.928	+ 0.0069	+ 0.004
655	2.0*	...	34 Aurigæ, β	5	49	15.61	55.8	3	4.404	+ 0.0045	.....
656	5.6	2	139 Tauri	5	49	18.43	58.6	4	3.722	+ 0.0032	— 0.001
657	3.7*	...	16 Leporis, η	5	50	1.74	57.5	5	2.734	+ 0.0023	— 0.002
658	3.0*	...	37 Aurigæ, θ	5	50	10.55	56.6	4	4.086	+ 0.0036	+ 0.004
659	6.5	17	Groombridge 1004 ...	5	50	14.48	56.9	23	26.668	+ 0.3512	.....
660	6.4	7	59 Orionis	5	51	8.22	57.7	5	3.114	+ 0.0024	+ 0.002
661	...	...	Lacaille 2075	5	51	35.54	57.1	1	2.238	+ 0.0025	.....
662	7.9	5.5	140 Tauri	5	51	59.03	57.4	3	3.636	+ 0.0029	.....
663	6.6	8	38 Aurigæ	5	53	12.36	55.5	7	4.315	+ 0.0035	.....
664	5.7	10	64 Orionis, χ^3	5	55	10.13	56.1	11	3.550	+ 0.0023	
665	4.8	6	1 Geminorum	5	55	36.68	58.3	10	+ 3.647	+ 0.0022	— 0.002

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0 1 "	1800+		"	"	"			
71 5 3.8	57.9	7	— 2.25	+ 0.513		818	189	Bradley 818
124 9	...	...	2.22	0.316		...	196	Columbæ, α
40 14 24.2	57.9	9	2.17	0.675		815	186	27 Aurigæ, σ
73 43	...	...	2.13	0.503	.....	...	...	*
123 28	...	...	2.07	0.319	.....	...	205	Piazz v. 205
75 0 6.1	56.4	6	2.05	0.498	.....	824	...	Bradley 824
73 58 43.3	57.7	5	2.03	0.503	.....	826	201	128 Tauri, (R.)
112 29 46.6	55.5	5	1.87	0.367	+ 0.37	837	219	13 Leporis, γ
65 22 5.8	58.3	4	1.81	0.536	.....	...	214	Piazz v. 214
65 23 36.4	57.7	3	1.80	0.536	.....	...	...	Lalande 10912
99 43 21.6	57.7	8	1.65	0.414	+ 0.03	844	234	53 Orionis, κ
57 55 12.3	57.7	7	1.55	0.569	.....	...	237	Piazz v. 237
80 10 31.3	55.7	5	1.55	0.481	.....	...	239	Piazz v. 239
123 28	...	...	1.47	0.319	.....	...	...	Lacaille 1998
75 52 1.5	57.4	3	1.36	0.497	+ 0.01	849	249	137 Tauri
62 25 29.9	56.7	5	1.35	0.549	+ 0.07	848	247	136 Tauri
120 39 49.2	58.9	4	1.35	0.333	.....	...	...	Lacaille 2011
110 53 38.4	56.6	4	1.28	0.374	+ 0.67	858	261	15 Leporis, δ
125 50	...	...	1.22	0.308	.....	...	267	Columbæ, β
69 45 12.6	56.7	5	1.22	0.519	+ 0.10	856	259	54 Orionis, χ^1
23 0 24.6	57.6	6	1.20	0.905	.....	...	246	Piazz v. 246
82 37 21.2	58.3	11	1.09	0.473	0.00	860	268	58 Orionis, α
23 7 2.4	58.1	3	1.07	0.904	.....	...	253	Piazz v. 253
35 43 53.8	58.1	3	1.05	0.718	+ 0.13	852	262	33 Aurigæ, δ
45 4 17.5	59.0	3	0.94	0.642	+ 0.03	859	269	34 Aurigæ, β
64 4 3.5	59.6	2	0.94	0.543	+ 0.01	862	273	139 Tauri
104 11 47.6	55.4	4	0.87	0.398	— 0.14	866	281	16 Leporis, η
52 48 5.0	55.8	3	0.86	0.596	+ 0.11	863	277	37 Aurigæ, θ
3 14 23.1	55.4	4	0.84	3.887	.....	...	...	Groombridge 1004
88 10 51.3	57.8	3	0.78	0.454	+ 0.03	869	283	59 Orionis
122 0	...	...	0.74	0.326	.....	...	...	Lacaille 2075
67 6 44.2	56.7	4	0.70	0.530	.....	867	285	140 Tauri
47 5 19.4	57.4	6	0.60	0.629	.....	868	293	38 Aurigæ
70 18 38.5	56.1	8	0.42	0.518	+ 0.03	878	304	64 Orionis, χ^3
66 43 58.5	58.2	13	— 0.38	+ 0.532	+ 0.11	880	307	1 Geminorum

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				h. m. s.	1800+		s.	s.	s.
666	6.4	6	66 Orionis	5 57 34.74	58.1	3	+ 3.169	+ 0.0020	- 0.001
667	7.4	4.5	2 Geminorum	5 58 16.65	58.0	2	3.657	+ 0.0021	- 0.003
668	5.6	4	36 Camelopardali	5 58 45.95	55.7	5	6.038	+ 0.0027	.....
669	5.0	3.5	67 Orionis, ν	5 59 34.73	58.5	19	3.425	+ 0.0018	+ 0.001
670	7.8	6	41 Aurigæ (1st star)...	6 0 53.01	55.3	5	4.595	+ 0.0013	.....
671	6.5	3	41 Aurigæ (2nd star) .	6 0 53.13	55.3	5	4.595	+ 0.0013	.....
672	3.9	4	7 Geminorum, η	6 6 25.58	56.9	8	3.627	+ 0.0008	- 0.007
673	4.6	1	44 Aurigæ, κ	6 6 27.42	56.2	8	3.830	+ 0.0005	- 0.005
674	5.7	6	71 Orionis.....	6 6 36.66	56.6	6	3.537	+ 0.0009	- 0.005
675	7.0	1	42 Aurigæ.....	6 7 8	...	...	4.478	- 0.0008	.....
676	4.9	3.5	2 Lyncis	6 7 16.19	57.1	4	5.301	- 0.0033	+ 0.003
677	5.8	3	72 Orionis, f^2	6 7 20.77	58.8	3	3.460	+ 0.0010	.....
678	7.7	1	Lalande 11875	6 7 22.04	60.1	2	3.848	+ 0.0004	.....
679	6.7	4	43 Aurigæ.....	6 7 50.41	55.3	4	4.476	- 0.0009	.....
680	4.7*	...	5 Monocerotis	6 8 1.66	55.5	5	2.926	+ 0.0016	0.000
681	9.2	7	Redhill 889	6 8 2.79	58.6	2	22.538	- 0.2140	.....
682	7.1	6	Bradley 912	6 8 11.11	57.1	3	4.014	0.0000	.....
683	7.5	1	Lalande 11910	6 8 22.19	61.2	1	3.917	- 0.0001	.....
684	6.0	1	74 Orionis, k^2	6 8 34.98	57.5	2	3.363	+ 0.0011	.....
685	...	...	Lalande 11920	6 8 42.33	61.1	1	3.925	- 0.0001	.....
686	7.3	1	3 Lyncis	6 9 9.93	57.1	1	5.565	- 0.0048	.....
687	6.2	4	75 Orionis, l	6 9 23.49	56.8	3	3.307	+ 0.0011	+ 0.001
688	5.9	6	45 Aurigæ.....	6 10 23.42	57.9	5	4.878	- 0.0031	.....
689	8.3	4	Redhill 897	6 12 48.23	58.6	2	34.285	- 0.8442	.....
690	3.0*	...	13 Geminorum, μ ...	6 14 29.42	57.1	11	3.627	+ 0.0002	+ 0.005
691	2.7*	...	1 Canis Majoris, ζ ...	6 14 56.42	56.0	6	2.302	+ 0.0019	.....
692	2.7*	...	2 Canis Majoris, β ...	6 16 32.19	56.9	5	2.642	+ 0.0017	+ 0.001
693	8.2	2.5	Lalande 12263	6 17 49.38	59.1	1	3.338	+ 0.0002	.....
694	7.5	1	Lalande 12268	6 17 54	...	...	3.338	+ 0.0002	.....
695	...	...	Lacaille 2252	6 17 57.53	58.1	1	2.275	+ 0.0020	.....
696	7.4	6	Lalande 12274	6 18 5.49	58.1	4	3.336	+ 0.0002	.....
697	6.4	5	6 Lyncis	6 18 37.30	57.4	3	5.226	- 0.0090	.....
698	9.5	3	Redhill 920	6 19 10.36	58.6	1	22.266	- 0.4903	.....
699	7.8	7	Bradley 937	6 19 10.70	56.3	5	3.990	- 0.0022	.....
700	5.6	2	48 Aurigæ.....	6 19 34.08	58.1	1	+ 3.859	- 0.0018	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	+1800		"	"	"			
85 50 11.6	57.9	5	— 0.21	+ 0.462	+ 0.02	885	322	66 Orionis
66 21 9.1	57.9	4	0.15	0.533	+ 0.01	884	323	2 Geminorum
24 15 39.1	57.1	7	0.11	0.881	.....	875	314	36 Camelopardali
75 13 6.7	57.8	8	— 0.04	0.500	+ 0.02	887	332	67 Orionis, ν
41 15 46.7	55.9	4	+ 0.08	0.671	.....	...	...	41 Aurigæ (1st star)
41 15 57.0	56.1	5	0.08	0.671	.....	886	334	41 Aurigæ (2nd star)
67 27 22.2	57.3	10	0.56	0.529	+ 0.02	909	22	7 Geminorum, η
60 27 16.2	54.9	9	0.56	0.558	+ 0.29	907	18	44 Aurigæ, κ
70 47 58.0	55.9	5	0.58	0.516	.....	911	23	71 Orionis
43 32 4.2	58.1	1	0.63	0.653	.....	905	19	42 Aurigæ
30 56 38.6	57.9	4	0.64	0.772	— 0.03	902	16	2 Lyncis
73 49 4.8	57.6	2	0.64	0.504	.....	913	29	72 Orionis, f^2
59 51 24.2	61.2	1	0.65	0.561	.....	...	...	Lalande 11875
43 35 24.4	58.0	4	0.69	0.652	.....	908	25	43 Aurigæ
96 14 7.6	54.7	4	0.70	0.426	.....	920	35	5 Monocerotis
3 55 37.2	58.3	5	0.70	3.285	.....	...	...	Redhill 889
54 48 29.2	56.3	4	0.72	0.585	.....	912	...	Bradley 912
57 41 26.1	61.2	1	0.73	0.571	.....	...	...	Lalande 11910
77 41 32.0	57.8	3	0.75	0.490	.....	919	37	74 Orionis, k^2
57 26 58.5	61.1	1	0.77	0.572	.....	...	...	Lalande 11920
28 10 55.8	58.1	3	0.80	0.811	.....	906	27	3 Lyncis
80 0 37.6	58.1	3	0.82	0.482	+ 0.08	921	45	75 Orionis, l
36 29 22.7	57.9	4	0.91	0.712	.....	915	40	45 Aurigæ
2 26 55.8	61.1	3	1.12	4.992	.....	...	...	Redhill 897
67 25 5.7	56.0	12	1.27	0.527	+ 0.14	929	74	13 Geminorum, μ
120 0 10.9	56.1	12	1.31	0.334	.....	933	81	1 Canis Majoris, ζ
107 53 22.5	56.4	8	1.45	0.384	+ 0.02	936	92	2 Canis Majoris, β
78 43 41.3	57.7	5	1.56	0.484	.....	...	...	Lalande 12263
78 42 15.1	59.1	1	1.56	0.484	.....	...	...	Lalande 12268
120 52 26.0	58.1	1	1.57	0.330	.....	...	...	Lacaille 2252
78 47 56.3	57.6	4	1.58	0.484	.....	...	...	Lalande 12274
31 44 24.0	57.8	5	1.63	0.759	.....	930	90	6 Lyncis
3 58 16.0	58.1	2	1.68	3.235	.....	...	...	Redhill 920
55 25 34.2	56.9	4	1.68	0.579	.....	937	...	Bradley 937
59 25 28.9	58.9	4	+ 1.71	+ 0.560	+ 0.04	938	98	48 Aurigæ

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.			Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h.	m.	s.	1800+		s.	s.	s.
701	6.2	8	78 Orionis.....	6	20	6.15	56.3	5	+ 3.067	+ 0.0008	.....
702	4.7*	...	18 Geminorum, ν	6	20	39.03	56.8	6	3.565	— 0.0008	— 0.002
703	5.7	5.5	Piazzi vi. 75	6	22	16.60	56.7	5	10.398	— 0.0947	.....
704	6.9	5.5	7 Lyncis	6	22	53.57	57.1	5	5.004	— 0.0096	.....
705	6.8	4	9 Lyncis	6	24	13.09	57.4	5	5.080	— 0.0108	.....
706	6.1	5.5	8 Lyncis	6	24	53.37	56.3	5	5.531	— 0.0155	.....
707	7.3	9	10 Lyncis	6	25	44.48	56.3	5	5.527	— 0.0160	.....
708	6.0	1	Piazzi vi. 151	6	25	45.85	59.1	3	2.641	+ 0.0014	.....
709	5.5*	...	Piazzi vi. 164	6	27	24.90	56.7	5	2.245	+ 0.0017	.....
710	7.0	8.5	41 Camelopardali.....	6	27	34.19	57.2	5	5.572	— 0.0177	.....
711	5.9	6	51 Aurigæ.....	6	28	57.27	55.1	5	4.166	— 0.0053	.....
712	5.0*	...	5 Canis Majoris, ξ^2 ...	6	29	11.40	57.7	5	2.513	+ 0.0015	.....
713	...	...	Piazzi vi. 175	6	29	24.08	58.1	3	2.223	+ 0.0017	.....
714	2.3*	...	24 Geminorum, γ	6	29	37.43	55.9	7	3.465	— 0.0014	+ 0.001
715	7.5	9	Bradley 968 (1st star)	6	32	28.18	57.5	5	5.326	— 0.0180	.....
716	9.6	2	Bradley 968 (2nd star)	6	32	28.86	58.1	3	5.326	— 0.0180	.....
717	6.0	1	Piazzi vi. 198	6	32	33.25	56.3	5	2.238	+ 0.0017	.....
718	5.2	12	Cephei 51 (Hev.)	6	33	39.52	57.6	25	30.591	— 1.7315	.....
719	8.1	8.5	12 Lyncis (1st star)...	6	33	50.52	57.8	6	5.324	— 0.0188	.....
720	5.4	4	12 Lyncis (2nd star)...	6	33	51.67	57.1	5	5.324	— 0.0188	.....
721	5.7	4	13 Lyncis	6	34	52.93	56.3	5	5.131	— 0.0169	.....
722	3.6	1	27 Geminorum, ϵ	6	35	19.07	56.4	6	3.696	— 0.0034	0.000
723	6.0	6	56 Aurigæ (1st star)...	6	36	38.62	56.3	5	4.334	— 0.0087	.....
724	Var.	...	56 Aurigæ (2nd star) .	6	36	40.18	56.3	5	4.334	— 0.0087	.....
725	3.7*	...	31 Geminorum, ξ	6	37	25.82	55.5	5	3.378	— 0.0017	— 0.007
726	5.1	4	43 Camelopardali	6	38	35.30	57.5	5	6.514	— 0.0441	+ 0.005
727	1.0*	...	9 Canis Majoris, α ...	6	38	58.63	57.3	10	2.681	+ 0.0010	— 0.035
728	5.8	3	17 Monocerotis.....	6	39	43.70	56.1	4	3.261	— 0.0012	.....
729	7.5	1	Lalande 13016	6	39	47.50	61.2	1	4.190	— 0.0084	.....
730	7.3	6	Piazzi vi. 233	6	39	56.94	58.0	5	2.576	+ 0.0012	.....
731	8.8	2	Lalande 13034	6	40	27.55	57.0	1	4.181	— 0.0084	.....
732	5.3	1	58 Aurigæ.....	6	40	51.71	56.8	6	4.254	— 0.0093	.....
733	6.4	9	59 Aurigæ.....	6	43	23.29	56.3	6	4.136	— 0.0087	.....
734	6.6	6.5	60 Aurigæ.....	6	43	37.15	54.5	5	4.120	— 0.0087	.....
735	8.2	1	Lacaille 2470	6	44	30.16	56.3	5	+ 2.399	+ 0.0014	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
0 1 "	1800+		"	"	"			
90 11 43.2	56.1	5	+ 1.75	+ 0.445	.....	944	108	78 Orionis
69 42 10.3	56.8	9	1.81	0.517	+ 0.01	942	109	18 Geminorum, ν
10 17 41.8	56.4	6	1.95	1.508	.....	...	75	Piazzi vi. 75
34 33 0.1	56.1	4	2.00	0.725	.....	...	115	7 Lyncis
33 30 33.5	57.9	5	2.11	0.736	.....	947	123	9 Lyncis
28 24 8.4	57.6	6	2.17	0.801	+ 0.15	946	125	8 Lyncis
28 24 45.4	56.3	5	2.25	0.801	+ 0.01	949	132	10 Lyncis
107 57 54.0	61.1	2	2.25	0.382	.....	...	151	Piazzi vi. 151
121 56	...	...	2.39	0.324	.....	...	164	Piazzi vi. 164
27 57 46.8	57.0	8	2.41	0.806	.....	954	141	41 Camelopardali
50 29 23.0	57.7	11	2.53	0.602	.....	963	161	51 Aurigæ
112 51 24.0	55.5	8	2.55	0.362	.....	972	170	5 Canis Majoris, ξ^2
122 36	...	...	2.56	0.321	.....	...	175	Piazzi vi. 175
73 29 6.5	55.7	11	2.59	0.500	+ 0.04	969	169	24 Geminorum, γ
30 25 12.0	57.8	6	2.83	0.769	.....	968	174	Bradley 968 (1st star)
30 25 16.1	61.2	1	2.83	0.769	.....	...	...	Bradley 968 (2nd star)
122 13	...	...	2.84	0.322	.....	...	198	Piazzi vi. 198
2 45 5.2	56.5	20	2.93	4.412	.....	...	21	Cephei 51 (Hev.)
30 25 15.4	58.5	8	2.95	0.768	+ 0.02	971	185	12 Lyncis (1st star)
30 25 21.4	57.4	8	2.95	0.768	.....		...	12 Lyncis (2nd star)
32 41 28.0	57.6	4	3.04	0.739	.....	976	192	13 Lyncis
64 44 1.0	55.9	4	3.08	0.531	+ 0.02	983	204	27 Geminorum, ϵ
46 17 16.1	58.3	5	3.19	0.622	.....	985	209	56 Aurigæ (1st star)
46 16 25.1	57.9	4	3.19	0.622	.....	...	...	56 Aurigæ (2nd star)
76 57 23.0	56.3	5	3.26	0.485	+ 0.22	989	217	31 Geminorum, ξ
20 57 22.5	58.0	3	3.36	0.936	0.00	980	208	43 Camelopardali
106 31 36.6	55.9	24	3.40	0.384	+ 1.24	994	227	9 Canis Majoris, α
81 48 55.0	56.8	3	3.46	0.468	.....	993	228	17 Monocerotis
49 40 6.9	61.2	1	3.47	0.601	.....	...	...	Lalande 13016
110 37 48.0	58.1	1	3.48	0.369	.....	...	233	Piazzi vi. 233
49 53	...	...	3.52	0.598	.....	...	...	Lalande 13034
48 3 28.9	57.2	3	3.56	0.609	+ 0.13	992	229	58 Aurigæ
50 58 6.6	57.7	5	3.78	0.591	.....	999	244	59 Aurigæ
51 23 29.0	58.3	7	3.80	0.588		1000	246	60 Aurigæ
117 10 25.3	54.7	5	+ 3.87	+ 0.342		...	...	Lacaille 2470

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				h.	m.	s.	1800+		s.	s.	s.
736	4.8	2	15 Lyncis	6	45	8.62	56.5	5	+ 5.220	— 0.0245	+ 0.004
737	5.5	3	38 Geminorum, <i>e</i>	6	46	44.68	59.1	4	3.383	— 0.0025	+ 0.001
738	4.0	1	14 Canis Majoris, <i>θ</i> ...	6	47	41.12	61.2	6	2.797	+ 0.0005	— 0.010
739	6.2	3	Piazzi vi. 278	6	47	59.59	55.9	5	2.366	+ 0.0014	.....
740	6.4	10	62 Aurigæ	6	49	30.26	56.4	7	4.101	— 0.0096	.....
741	5.5	4	19 Canis Majoris	6	49	33.27	54.9	5	2.597	+ 0.0009	.....
742	4.4	3	20 Canis Majoris, <i>ι</i> ...	6	49	53.57	60.5	7	2.676	+ 0.0008	— 0.002
743	6.7	8	39 Geminorum	6	50	9.64	56.3	5	3.716	— 0.0056	.....
744	1.7*	...	21 Canis Majoris, <i>ε</i> ...	6	53	7.45	55.3	5	2.357	+ 0.0013	0.000
745	8.3?	0.5	*	6	54	2	...	...	3.288	— 0.0024	.....
746	...	...	*	6	54	32.61	61.2	1	3.286	— 0.0025	.....
747	6.9	6	Piazzi vi. 305	6	54	36.26	55.4	4	3.809	— 0.0073	.....
748	8.4	2	*	6	54	47.97	61.2	3	3.287	— 0.0025	.....
749	9.6	8	Redhill 1012	6	55	22.30	57.6	5	16.607	— 0.7361	.....
750	6.4	1	Lacaille 2573	6	55	29.22	57.1	5	2.444	+ 0.0011	.....
751	7.0	0.5	Lalande 13637	6	55	34	...	...	3.283	— 0.0025	.....
752	6.4	4.5	Piazzi vi. 313	6	55	38.49	60.0	8	3.285	— 0.0026	.....
753	Var.	...	43 Geminorum, <i>ζ</i>	6	55	48.22	55.7	5	3.564	— 0.0050	— 0.001
754	...	...	22 Canis Majoris	6	56	8.67	58.1	2	2.390	+ 0.0013	— 0.003
755	7.9	12	Piazzi vi. 319	6	56	29.91	55.4	7	2.980	— 0.0007	.....
756	4.5	2	23 Canis Majoris, <i>γ</i> ...	6	57	25.51	58.8	10	2.715	+ 0.0005	+ 0.002
757	6.4	4	Piazzi vi. 285	6	58	37.96	57.6	5	11.723	— 0.3414	.....
758	Var.	...	Geminorum (R.) ...	6	58	55.50	55.3	5	3.619	— 0.0059	.....
759	7.4	7	Piazzi vi. 330	7	0	23.89	57.3	7	3.828	— 0.0085	.....
760	Var.	...	Canis Minoris (R.)	7	1	0.50	57.4	4	3.305	— 0.0031	.....
761	4.7*	...	46 Geminorum, <i>τ</i>	7	2	13.53	56.9	6	3.830	— 0.0088	— 0.003
762	2.5	1	25 Canis Majoris, <i>δ</i> ...	7	2	42.06	54.8	6	2.439	+ 0.0011	0.000
763	7.4	12	Redhill 1029	7	2	57.02	57.7	7	16.360	— 0.8147	.....
764	5.7	5	20 Monocerotis	7	3	16.38	59.5	5	2.982	— 0.0009	+ 0.007
765	7.6	8	Bradley 1036	7	3	17.10	58.0	6	3.430	— 0.0044	.....
766	5.6	4	18 Lyncis	7	3	40.27	57.8	5	5.288	— 0.0365	— 0.017
767	8.5	3	*	7	3	54.19	61.2	3	3.449	— 0.0047	.....
768	8.4	4	Piazzi vii. 9	7	4	39.47	59.8	3	3.448	— 0.0048	.....
769	7.5	3	Bradley 1044	7	4	49.14	57.9	3	3.426	— 0.0045	
770	5.3	3	51 Geminorum	7	5	19.78	60.4	5	+ 3.450	— 0.0049	+ 0.002

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0 ' "	1800+		"	"	"			
31 23 58.5	57.5	6	+ 3.93	+ 0.745	+ 0.18	998	250	15 Lyncis
76 38 51.5	57.5	3	4.06	0.481	+ 0.09	1009	266	38 Geminorum, <i>e</i>
101 51 59.4	61.2	4	4.14	0.397	+ 0.03	1011	274	14 Canis Majoris, <i>θ</i>
118 21 2.6	56.2	7	4.17	0.336	.....	...	278	Piazzi vi. 278
51 45 35.0	57.1	8	4.30	0.583	.....	1010	276	62 Aurigæ
109 57 40.3	55.9	7	4.31	0.368	.....	1018	287	19 Canis Majoris
106 52 32.1	60.2	6	4.33	0.379	- 0.01	1019	289	20 Canis Majoris, <i>ι</i>
63 44 20.3	56.5	7	4.35	0.527	.....	1013	283	39 Geminorum
118 47 1.9	56.2	8	4.61	0.333	+ 0.02	1023	304	21 Canis Majoris, <i>ε</i>
80 32 52.8	61.2	1	4.68	0.464	.....	...	...	*
80 39	...	...	4.73	0.464	.....	...	...	*
60 25 52.8	56.2	6	4.73	0.538	[+ 0.72]	...	305	Piazzi vi. 305
80 36 1.4	61.2	3	4.75	0.464	.....	...	...	*
5 28 43.1	57.8	5	4.79	2.350	.....	...	...	Redhill 1012
115 45 14.8	54.9	4	4.80	0.344	.....	...	...	Lacaille 2573
80 46 25.1	61.2	1	4.82	0.463	.....	...	...	Lalande 13637
80 39 41.7	58.0	9	4.83	0.463	.....	...	313	Piazzi vi. 313
69 13 41.8	55.9	5	4.84	0.503	+ 0.01	1024	312	43 Geminorum, <i>ζ</i>
117 44 12.7	60.5	3	4.86	0.336	+ 0.01	1027	320	22 Canis Majoris
94 3 52.1	55.8	5	4.89	0.420	.....	...	319	Piazzi vi. 319
105 25 46.4	58.9	6	4.97	0.381	+ 0.01	1028	325	23 Canis Majoris, <i>γ</i>
8 30 1.1	56.8	3	5.08	1.652	.....	...	285	Piazzi vi. 285
67 5 1.9	57.5	5	5.10	0.508	.....	...	...	Geminorum (R.)
59 38 0.1	55.1	4	5.23	0.537	.....	...	330	Piazzi vi. 330
79 45 32.7	57.2	1	5.28	0.463	.....	...	...	Canis Minoris (R.)
59 31 44.5	56.7	7	5.38	0.536	+ 0.05	1033	341	46 Geminorum, <i>τ</i>
116 10 23.9	55.4	6	5.42	0.340	- 0.01	1042	2	25 Canis Majoris, <i>δ</i>
5 31 52.6	57.8	5	5.44	2.295	.....	...	...	Redhill 1029
94 1 19.2	55.2	4	5.47	0.416	- 0.21	1041	4	20 Monocerotis
74 26 26.3	55.9	4	5.47	0.479	.....	1036	346	Bradley 1036
30 7 7.4	56.6	2	5.50	0.740	+ 0.29	1031	340	18 Lyncis
73 38 39.1	61.2	2	5.52	0.482	.....	...	...	*
73 41 5.4	60.2	6	5.59	0.481	.....	...	9	Piazzi vii. 9
74 35 25.8	57.1	3	5.60	0.477	- 0.02	1044	11	Bradley 1044
73 36 25.8	60.2	4	+ 5.64	+ 0.480	+ 0.03	1046	17	51 Geminorum

747. The proper motion in N.P.D. is from the B.A.C. and appears to be correct.

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				h. m. s.			1800+		s.	s.	s.
771	8.0	1	*	7 5 51	...	...	...	...	+ 3.442	— 0.0048	
772	7.4	4	Bradley 1048	7 5 58.80	56.7	4	...	...	3.668	— 0.0074	
773	6.4	3	52 Geminorum	7 6 8.03	57.1	3	...	...	3.673	— 0.0074	.....
774	7.7	1	44 Camelopardali	7 6 30.10	57.7	2	...	...	5.217	— 0.0364	.....
775	6.0*	...	Lacaille 2660	7 6 41.19	56.2	1	...	...	2.315	+ 0.0012	.....
776	7.3	2.5	45 Camelopardali	7 7 2.25	58.2	4	...	...	5.234	— 0.0372	.....
777	7.3	7	Lalande 14038	7 7 11.28	55.1	6	...	...	3.595	— 0.0066	.....
778	7.0	6	Piazzi vii. 35	7 8 22.87	57.4	5	...	...	3.721	— 0.0084	.....
779	4.5	1.5	27 Canis Majoris	7 8 33.11	59.2	1	...	...	2.446	+ 0.0011	— 0.001
780	6.4	6	Piazzi vi. 334	7 8 59.16	57.7	5	...	...	11.291	— 0.3678	.....
781	8.3	1	Bradley 1035	7 9 39	...	...	...	...	7.336	— 0.1165	.....
782	6.0*	...	Lacaille 2688	7 9 55.97	59.2	4	...	...	2.322	+ 0.0012	.....
783	6.4	3	47 Camelopardali	7 10 0.35	57.4	3	...	...	5.294	— 0.0406	.....
784	4.3	3	54 Geminorum, λ	7 10 2.67	58.4	3	...	...	3.457	— 0.0054	— 0.002
785	7.2	8	Groombridge 1119 ...	7 10 10.04	56.3	10	...	...	77.783	— 26.2432	[— 0.323]
786	3.3*	...	55 Geminorum, δ	7 11 45.54	58.8	24	...	...	3.592	— 0.0072	0.000
787	6.0*	...	Lacaille 2729	7 13 8.56	57.8	5	...	...	2.323	+ 0.0012	.....
788	6.5*	...	Lacaille 2763	7 16 50.16	56.5	5	...	...	2.273	+ 0.0013	.....
789	4.3	6	60 Geminorum, ϵ	7 17 1.62	58.1	8	...	...	3.745	— 0.0100	— 0.008
790	6.5*	...	Lacaille 2771	7 18 13.13	56.9	5	...	...	2.339	+ 0.0012	.....
791	2.7*	...	31 Canis Majoris, η ...	7 18 33.52	55.4	5	...	...	2.373	+ 0.0011	— 0.004
792	5.9	4.5	22 Lyncis	7 19 17.40	55.7	5	...	...	4.568	— 0.0264	.....
793	3.0*	...	3 Canis Minoris, β ...	7 19 33.40	59.4	18	...	...	3.261	— 0.0041	.....
794	4.9	1	62 Geminorum, ρ	7 20 5.93	55.3	5	...	...	3.859	— 0.0122	+ 0.007
795	...	...	Piazzi vii. 113	7 20 20.74	58.1	2	...	...	2.303	+ 0.0012	.....
796	6.4	10	Piazzi vii. 116	7 21 16.79	56.5	8	...	...	2.822	— 0.0005	.....
797	Var.	...	Canis Minoris (S.)	7 25 7.13	56.6	5	...	...	3.261	— 0.0044	.....
798	...	...	Geminorum, α^1 ...	7 25 39.29	57.8	15	...	...	3.856	— 0.0132	.....
799	1.7*	...	66 Geminorum, α^2 ...	7 25 39.74	58.4	13	...	...	3.856	— 0.0132	— 0.013
800	6.4	7.5	Bradley 1090	7 26 14.69	57.0	7	...	...	3.827	— 0.0126	.....
801	4.6	4	69 Geminorum, ν	7 27 17.55	58.3	8	...	...	3.710	— 0.0109	— 0.001
802	6.6	6	23 Lyncis	7 29 13.70	57.2	5	...	...	5.006	— 0.0432	.....
803	6.1	3.5	70 Geminorum	7 29 21.21	57.4	5	...	...	3.950	— 0.0156	.....
804	...	...	Lalande 14864	7 29 53.94	61.1	1	...	...	3.196	— 0.0040	.....
805	5.6	4	71 Geminorum, σ	7 30 1.29	55.8	5	...	...	+ 3.934	— 0.0155	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
73 54 45.8	61.2	2	+ 5.68	+ 0.479	.....	...	...	*
65 3 12.3	54.2	2	5.68	0.510	.....	1048	...	Bradley 1048
64 52 31.5	58.1	3	5.71	0.511	.....	1049	21	52 Geminorum
30 50 17.8	60.5	3	5.74	0.727	.....	1037	10	44 Camelopardali
120 35 22.4	59.1	1	5.75	0.321	.....	...	...	Lacaille 2660
30 37 44.6	59.2	2	5.78	0.729	.....	1040	16	45 Camelopardali
67 47 38.6	57.5	3	5.80	0.507	.....	...	...	Lalande 14038
63 3 41.1	54.2	3	5.89	0.516	.....	...	35	Piazzi vii. 35
116 6 51.0	58.2	1	5.91	0.338	- 0.03	1059	45	27 Canis Majoris
8 49 49.6	56.6	4	5.95	1.569	.....	...	334	Piazzi vi. 334
16 39 22.5	57.8	3	6.00	1.018	.....	1035	...	Bradley 1035
120 26	...	...	6.02	0.320	.....	...	...	Lacaille 2688
29 50 39.3	57.1	3	6.03	0.735	+ 0.01	1051	36	47 Camelopardali
73 12 37.9	58.4	3	6.04	0.478	+ 0.04	1058	50	54 Geminorum, λ
0 58 37.5	54.2	2	6.05	10.814	.....	...	...	Groombridge 1119
67 45 48.7	57.3	9	6.18	0.496	+ 0.02	1062	57	55 Geminorum, δ
120 32 42.7	56.2	6	6.29	0.319	.....	...	...	Lacaille 2729
122 20	...	...	6.60	0.310	.....	...	...	Lacaille 2763
61 55 38.3	57.6	10	6.62	0.513	+ 0.09	1072	90	60 Geminorum, ι
120 10 48.4	55.6	5	6.71	0.319	.....	...	...	Lacaille 2771
119 1 55.9	55.7	7	6.74	0.323	- 0.01	1081	104	31 Canis Majoris, η
40 2 35.4	58.0	5	6.80	0.624	+ 0.08	1073	95	22 Lyncis
81 25 53.6	57.2	7	6.82	0.444	.....	1079	106	3 Canis Minoris, β
57 56 25.9	56.8	6	6.86	0.526	- 0.19	1078	105	62 Geminorum, ρ
121 27 42.6	61.2	3	6.89	0.313	.....	...	113	Piazzi vii. 113
101 16 33.3	57.2	4	6.97	0.383	.....	...	116	Piazzi vii. 116
81 23 8.6	56.9	4	7.28	0.440	.....	...	...	Canis Minoris (S.)
57 48 31.8	58.2	13	7.32	0.520	.....	...	127	Geminorum, α ¹
57 48 29.5	57.3	15	7.32	0.520	+ 0.08	1087	128	66 Geminorum, α ²
58 44 17.7	56.0	7	7.37	0.516	.....	1090	...	Bradley 1090
62 47 46.8	57.0	6	7.46	0.499	+ 0.11	1094	138	69 Geminorum, υ
32 36 10.1	57.3	5	7.62	0.673	.....	1093	140	23 Lyncis
54 38 29.8	58.2	4	7.62	0.529	.....	1097	145	70 Geminorum
84 17	...	...	7.67	0.428		...	158	Lalande 14864
55 5 53.3	58.4	4	+ 7.68	+ 0.527		1099	152	71 Geminorum, ο

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				h. m. s.	1800+		s.	s.	s.
806	8.4	17	Radcliffe 1979	7 30 47.60	56.1	19	+24.874	-3.1083	
807	6.9	8	Bradley, 1101	7 30 56.56	55.8	5	3.853	-0.0140	
808	...	...	Redhill 1105	7 31 20	...	...	11.515	-0.5221	.....
809	1.0*	...	10 Canis Minoris, α ...	7 31 58.35	57.3	15	3.192	-0.0041	-0.048
810	8.1	3	W.B. (1) VII. 990 ...	7 32 20.31	60.7	6	3.192	-0.0041	.....
811	7.0	2	Bradley 1107	7 32 40.68	60.9	6	3.192	-0.0041	.....
812	6.7	4.5	Piazzi vii. 132	7 32 57.88	57.1	5	10.499	-0.4215	.....
813	5.0	2	75 Geminorum, σ	7 34 33.45	57.3	5	3.757	-0.0127	.....
814	Var.	...	Geminorum (S.) ...	7 34 38.28	56.2	3	3.612	-0.0102	.....
815	8.5	2	*	7 34 38.66	58.1	2	3.607	-0.0102	.....
816	7.6	16.5	Radcliffe 2010	7 34 59.03	56.5	22	16.462	-1.2860	.....
817	1.3*	...	78 Geminorum, β ...	7 36 44.64	56.8	17	3.730	-0.0127	-0.049
818	7.2	2	W.B. (2) VII. 1076 ...	7 36 58.91	61.2	5	3.675	-0.0117	.....
819	7.7	12	Radcliffe 2020	7 38 53.91	58.1	8	20.829	-2.3057	.....
820	Var.	...	Geminorum (T.) var.	7 40 53.63	55.1	3	3.612	-0.0110	.....
821	5.5	8	Piazzi vii. 187	7 42 36.02	56.0	6	9.806	-0.3949	.....
822	6.7	9	Groombridge 1359 ...	7 42 53.67	57.6	9	15.465	-1.2191	.....
823	...	...	Lalande 15277	7 42 59.21	61.2	1	2.520	+0.0007	.....
824	6.3	7.5	Bradley 1130	7 43 8.86	58.2	8	2.522	+0.0008	.....
825	5.7	0.5	6 Puppis	7 43 21.76	57.3	7	2.707	-0.0001	.....
826	...	...	Argûs, ξ	7 43 24.48	59.0	4	2.523	+0.0009	+0.001
827	5.0*	...	83 Geminorum, ϕ ...	7 44 55.42	55.4	5	3.686	-0.0130	-0.004
828	5.4	1.5	9 Puppis	7 45 17.25	57.3	7	2.784	-0.0006	-0.006
829	8.5	5.5	W.B. (2) VII. 1331 ...	7 46 52.31	60.2	6	3.555	-0.0105	.....
830	7.3	1	Lacaille 3072	7 50 47.82	55.4	5	2.391	+0.0013	.....
831	8.3	13	Radcliffe 2056	7 51 57.21	55.6	12	15.179	-1.2885	.....
832	6.0*	...	Piazzi vii. 277	7 52 5.33	56.3	5	2.391	+0.0013	.....
833	7.2	7	Bradley 1142	7 52 36.68	56.9	7	3.469	-0.0096	.....
834	6.0	1	3 Cancrî	7 52 45.65	59.9	6	3.448	-0.0093	-0.003
835	8.2	1	*	7 53 47.89	57.8	5	2.446	+0.0011	.....
836	5.5	5	28 Monocerotis	7 54 6.03	57.4	6	3.052	-0.0033	.....
837	5.5	8	6 Cancrî	7 54 54.84	56.3	6	3.700	-0.0147	-0.005
838	5.1	9	Bradley 1153	7 54 58.82	55.8	9	3.128	-0.0043	-0.002
839	8.8	7	Radcliffe 2069	7 56 38.08	55.3	4	18.522	-2.1388	
840	8.0	3.5	Rumker 2394	7 57 19.99	59.2	2	+3.451	-0.0097	

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° ' "	1800+		"	"	"			
3 14 17.0	58.1	2	+ 7.74	+ 3.344		...	...	Radcliffe 1979
57 40 22.5	57.0	5	7.75	0.515		1101	...	Bradley 1101
8 18 11.3	59.1	1	7.78	1.545	.....	...	...	Redhill 1105
84 25 9.2	55.8	12	7.83	0.425	+ 1.08	1106	168	10 Canis Minoris, α
84 24 31.1	61.2	2	7.86	0.425	.....	...	...	W.B. (1) VII. 990
84 27 0.4	59.7	4	7.89	0.424	.....	1107	170	Bradley 1107
9 23 38.1	61.2	1	7.91	1.404	.....	...	132	Piazzi vii. 132
60 46 52.6	55.9	4	8.04	0.499	.....	1108	178	75 Geminorum, σ
66 13 24.5	56.2	1	8.05	0.480	.....	...	...	Geminorum (S)
66 23 40.8	58.2	1	8.05	0.479	.....	...	...	*
5 13 20.9	57.2	2	8.07	2.195	.....	...	...	Radcliffe 2010
61 38 20.3	56.6	11	8.22	0.493	+ 0.06	1112	191	78 Geminorum, β
63 40 38.4	61.2	1	8.24	0.485	.....	...	...	W.B. (2) VII. 1076
3 54 43.5	56.8	7	8.39	2.755	.....	...	...	Radcliffe 2020
65 55 15.7	56.1	1	8.55	0.473	.....	...	...	Geminorum (T) var.
10 8 50.0	57.2	7	8.68	1.285	.....	...	187	Piazzi vii. 187
5 33 5.5	58.2	4	8.71	2.028	.....	...	...	Groombridge 1359
114 36 56.6	58.1	1	8.71	0.327	.....	...	...	Lalande 15277
114 33 53.8	57.5	9	8.72	0.327	.....	1130	...	Bradley 1130
106 52 26.8	55.4	4	8.75	0.352	.....	1129	229	6 Puppis
114 30 38.8	60.8	7	8.75	0.328	- 0.02	1132	230	Argûs, ξ
62 52 29.4	54.2	5	8.87	0.479	+ 0.05	1128	233	83 Geminorum, ϕ
103 31 45.8	55.8	8	8.89	0.360	+ 0.36	1134	240	9 Puppis
67 57 56.3	60.2	5	9.02	0.459	.....	...	...	W.B. (2) VII. 1331
119 54 48.4	56.2	6	9.32	0.305	.....	...	...	Lacaille 3072
5 34 11.8	56.8	5	9.41	1.951	.....	...	...	Radcliffe 2056
119 57 36.8	55.4	7	9.42	0.304	.....	...	277	Piazzi vii. 277
71 22 26.0	55.6	5	9.47	0.443	.....	1142	273	Bradley 1142
72 18 39.1	60.2	6	9.48	0.439	.....	1143	275	3 Cancri
118 3 7.1	57.7	4	9.55	0.310	.....	...	...	*
91 0 24.6	55.7	6	9.58	0.387	.....	1151	284	28 Monocerotis
61 48 58.1	58.0	9	9.64	0.469	+ 0.07	1149	285	6 Cancri
87 17 2.2	55.8	6	9.65	0.395	- 0.12	1153	289	Bradley 1153
4 19 17.8	57.2	4	9.77	2.355		...	...	Radcliffe 2069
71 59 3.2	61.2	3	+ 9.83	+ 0.435		...	295	Rumker 2394

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				h. m. s.	1800+		s.	s.	s.
841	7.5	11	Bradley 1158	7 58 18.28	56.2	7	+ 3.562	— 0.0121	— 0.010
842	3.0*	...	15 Argûs	8 1 34.95	57.0	9	2.561	+ 0.0009	— 0.007
843	5.9	4	Bradley 1147	8 1 51.06	57.1	3	7.756	— 0.2551	.....
844	6.0	9.5	14 Cancrî, ψ^2	8 2 0.91	56.8	14	3.632	— 0.0141	— 0.006
845	7.1	8	Piazzi vii. 321	8 2 51.75	57.0	5	3.816	— 0.0188	.....
846	6.5	5	18 Puppis	8 4 10.44	56.6	5	2.799	— 0.0009	.....
847	5.4	3	16 Cancrî, ζ^1	8 4 10.78	55.6	5	3.446	— 0.0103	+ 0.004
848	6.5	8	Cancrî, ζ^2	8 4 11.01	55.7	5	3.446	— 0.0103	.....
849	6.2	9	W.B. (2) VIII. 71-2 .	8 5 2.10	58.3	8	3.420	— 0.0099	.....
850	8.5	12.5	Radcliffe 2099	8 6 35.49	56.1	13	20.489	— 2.9734	.....
851	Var.	...	Cancrî (R)	8 8 50.55	56.9	10	3.316	— 0.0080	.....
852	4.0	2	17 Cancrî, β	8 8 55.22	59.7	8	3.264	— 0.0071	— 0.004
853	5.4	6	18 Cancrî, χ	8 11 33.29	55.0	5	3.661	— 0.0161	0.000
854	6.6	6	Piazzi viii. 42	8 12 10.71	56.6	8	3.506	— 0.0123	.....
855	5.1	2	31 Lyncis	8 13 14.40	55.4	5	4.137	— 0.0310	— 0.002
856	7.4	9	Groombridge 1418 ...	8 14 8.74	56.4	7	17.348	— 2.1896	.....
857	6.3	1	20 Cancrî, d^1	8 15 20.56	61.2	2	3.450	— 0.0113	— 0.005
858	8.6	5	Radcliffe 2129	8 16 6.61	55.5	4	17.733	— 2.3499	.....
859	7.4	7	Bradley 1188	8 16 47.17	55.8	6	3.423	— 0.0108	.....
860	6.5	6	Groombridge 1437 ...	8 17 50.01	58.6	5	4.218	— 0.0353	.....
861	6.6	5	25 Cancrî, d^2	8 17 54.14	56.2	4	3.420	— 0.0109	— 0.015
862	6.1	5	22 Cancrî, ϕ^1	8 17 56.44	58.7	4	3.667	— 0.0171	.....
863	8.7	1	Lalande 16504	8 18 9.14	61.2	2	3.670	— 0.0173	.....
864	7.4	9	24 Cancrî, v^1 (1st star)	8 18 19.89	58.0	5	3.585	— 0.0149	— 0.002
865	8.1	6	Cancrî, v^1 (2nd star)	8 18 20.31	59.2	2	3.585	— 0.0149	.....
866	3.3*	...	1 Ursæ Majoris, σ	8 18 36.16	57.1	5	5.072	— 0.0759	— 0.019
867	6.2	5	27 Cancrî	8 18 59.13	58.2	3	3.328	— 0.0089	.....
868	5.8	4.5	Piazzi viii. 72	8 19 1.20	55.4	5	2.592	+ 0.0011	.....
869	9.3	2	Piazzi viii. 74	8 19 4.22	58.2	1	2.592	+ 0.0011	.....
870	6.5	1	28 Cancrî, v^2	8 20 18.48	59.2	1	3.573	— 0.0148	— 0.004
871	...	...	29 Cancrî	8 20 48.42	58.4	3	3.358	— 0.0097	— 0.002
872	7.7	2	Piazzi viii. 79	8 21 21.26	61.2	3	3.576	— 0.0150	.....
873	6.1	7	30 Cancrî, v^3	8 23 13.57	55.0	5	3.568	— 0.0150	— 0.007
874	5.8	16	33 Cancrî, η	8 24 36.48	58.6	18	3.485	— 0.0130	— 0.005
875	7.7	10	Radcliffe 2162	8 26 16.23	56.3	8	+14.018	— 1.4828	

842. The nomenclature of the Nautical Almanac is retained.

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° ' "	1800+		"	"	"			
67 8 39.1	56.5	9	+ 9.90	+ 0.449		1158	299	Bradley 1158
113 54 12.0	58.6	8	10.15	0.318	- 0.06	1170	320	15 Argûs
13 49 24.5	57.1	2	10.17	0.971	.....	1147	...	Bradley 1147
64 4 16.0	56.2	7	10.18	0.452	+ 0.35	1167	314	14 Cancrî, ψ^2
57 6 20.0	56.0	5	10.25	0.474	.....	...	321	Piazzi vii. 321
103 23 24.6	55.5	4	10.34	0.346	.....	1176	9	18 Puppis
71 55 58.7	58.1	11	10.34	0.426	+ 0.11	1175	5	16 Cancrî, ζ^1
71 56 4.0	58.5	9	10.34	0.426	.....	...	6	Cancrî, ζ^2
73 4 8.7	57.8	5	10.41	0.422	.....	...	...	W.B. (2) VIII. 71-2
3 44 19.8	56.2	5	10.53	2.539	.....	...	...	Radcliffe 2099
77 50 48.1	57.2	6	10.69	0.404	.....	...	...	Cancrî (R)
80 23 9.7	59.1	9	10.70	0.398	+ 0.05	1180	28	17 Cancrî, β
62 19 55.6	56.3	7	10.89	0.444	+ 0.38	1181	37	18 Cancrî, χ
68 48 48.8	56.0	5	10.93	0.424	.....	...	42	Piazzi viii. 42
46 21 57.3	57.7	7	11.01	0.500	+ 0.12	1183	43	31 Lyncis
4 27 48.5	55.3	6	11.09	2.103	.....	...	...	Groombridge 1418
71 13 16.2	61.2	2	11.17	0.413	+ 0.02	1185	50	20 Cancrî, d^1
4 19 18.5	57.5	4	11.22	2.138	.....	...	...	Radcliffe 2129
72 21 50.0	55.6	5	11.27	0.409	.....	1188	54	Bradley 1188
43 52 42.4	58.5	5	11.35	0.502	.....	...	...	Groombridge 1437
72 29 43.4	56.0	5	11.35	0.407	+ 0.15	1192	62	25 Cancrî, d^2
61 38 54.3	55.0	5	11.36	0.437	.....	1190	59	22 Cancrî, ϕ^1
61 28 55.3	61.2	1	11.37	0.436	.....	...	61	Lalande 16504
65 0 31.3	60.4	4	11.38	0.426	+ 0.09	1193	65	24 Cancrî, v^1 (1st star)
65 0 27.0	59.8	5	11.38	0.426	.....	...	66	Cancrî, v^1 (2nd star)
28 49 6.4	59.2	6	11.40	0.605	+ 0.13	1186	57	1 Ursæ Majoris, σ
76 53 10.3	59.0	4	11.43	0.394	.....	1196	68	27 Cancrî
113 35 40.8	55.0	4	11.43	0.306	.....	...	72	Piazzi viii. 72
113 35 37.8	58.2	1	11.44	0.306	.....	...	74	Piazzi viii. 74
65 24	...	...	11.52	0.421	+ 0.07	1198	76	28 Cancrî, v^2
75 19 42.6	59.2	1	11.56	0.395	+ 0.01	1200	77	29 Cancrî
65 11 30.8	61.1	1	11.60	0.420	.....	...	79	Piazzi viii. 79
65 26 57.4	55.4	5	11.73	0.417	+ 0.07	1201	84	30 Cancrî, v^8
69 5 8.6	58.7	14	11.83	0.405	+ 0.06	1207	88	33 Cancrî, η
5 36 9.1	56.0	6	+ 11.95	+ 1.637	.....	...	...	Radcliffe 2162

Second Radcliffe Catalogue of Stars

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
876	6.0*	...	Lacaille 3386	8 27 23.76	57.8	7	+ 2.427	+ 0.0021	.....
877	6.5	2.5	Lacaille 3406	8 29 32.62	56.4	5	2.546	+ 0.0018	.....
878	6.2	2	39 Cancrī	8 32 2.86	61.2	3	3.466	— 0.0132	— 0.009
879	6.2	2	40 Cancrī	8 32 7.97	61.3	2	3.465	— 0.0132	— 0.006
880	4.6	6	43 Cancrī, γ	8 35 10.77	59.1	10	3.492	— 0.0142	— 0.011
881	7.7	12	Radcliffe 2189	8 35 13.60	57.2	12	18.344	— 3.0140	.....
882	8.4	7.5	Σ 1263 (1st star)	8 35 55.35	58.4	6	4.015	— 0.0324	.....
883	9.1	5	Σ 1263 (2nd star) ...	8 35 55.93	58.5	3	4.015	— 0.0324	.....
884	Var.	...	Cancrī (S)	8 35 56.01	54.9	5	3.441	— 0.0130	.....
885	4.0*	...	47 Cancrī, δ	8 36 43.40	57.1	6	3.422	— 0.0124	— 0.002
886	8.3	6	Radcliffe 2198	8 38 14.43	56.3	4	15.443	— 1.8424	.....
887	3.3*	...	11 Hydræ, ε	8 39 21.54	58.2	16	3.197	— 0.0071	— 0.013
888	5.9	5	5 Ursæ Majoris, b	8 41 48.43	55.0	5	5.025	— 0.0898	.....
889	8.1	6.5	Σ 1280 (1st star)	8 42 9.55	58.1	3	6.092	— 0.1753	.....
890	8.3	5	Σ 1280 (2nd star) ...	8 42 10.14	58.2	3	6.092	— 0.1753	.....
891	7.4	8	52 Cancrī	8 43 20.30	56.9	7	3.372	— 0.0116	.....
892	8.8	5.5	Radcliffe 2210	8 43 48.78	54.8	5	14.683	— 1.9354	.....
893	6.4	7	53 Cancrī, ρ ¹	8 44 3.10	57.6	6	3.627	— 0.0195	.....
894	6.2	7	55 Cancrī, ρ ²	8 44 15.11	57.8	6	3.628	— 0.0195	— 0.040
895	5.9	4	6 Ursæ Majoris	8 44 34.61	57.5	5	5.245	— 0.1079	.....
896	9.0	4.5	Redhill 1285	8 45 13.32	56.2	5	14.792	— 1.8569	.....
897	6.7	7.5	Radcliffe 2218	8 45 27.14	56.8	13	13.957	— 1.7421	.....
898	Var.	...	Hydræ (S)	8 46 15.66	56.7	5	3.135	— 0.0059	.....
899	...	...	Piazzi viii. 203	8 46 41.55	61.3	1	3.335	— 0.0108	.....
900	...	...	*	8 47 3.80	61.2	1	3.136	— 0.0059	.....
901	6.1	5	Piazzi viii. 202	8 47 20.35	56.4	5	4.109	— 0.0397	.....
902	8.2	5	Piazzi viii. 208	8 47 53.54	56.2	2	3.333	— 0.0108	.....
903	...	...	Lalande 17611	8 48 2.68	61.3	1	2.945	— 0.0022	.....
904	6.1	2	60 Cancrī	8 48 16.65	59.2	3	3.286	— 0.0096	— 0.002
905	7.8	3	17 Hydræ (N. star) ...	8 48 37.83	58.2	1	2.943	— 0.0022	.....
906	7.4	3	17 Hydræ (S. star) ...	8 48 37.88	58.2	3	2.943	— 0.0022	.....
907	7.0*	...	17 Hydræ (as one mass)	8 48 37.91	55.2	2	2.943	— 0.0022	.....
908	Var.	...	Cancrī (T)	8 48 40.16	56.1	3	3.440	— 0.0140	.....
909	Var.	...	Hydræ (T)	8 48 51.15	58.2	5	2.922	— 0.0018	.....
910	3.0*	...	9 Ursæ Majoris, ι	8 49 36.36	56.2	10	+ 4.192	— 0.0445	— 0.047

Mean N.P.D. 1860, Jan. 1.			Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
°	'	"	1800+		"	"	"			
121	3	19.9	56.5	11	+ 12.03	+ 0.279	.....	...	...	Lacaille 3386
116	21	45.5	56.0	7	12.18	0.290	.....	...	...	Lacaille 3406
69	30	2.4	61.2	3	12.35	0.393	0.00	1222	126	39 Cancri
69	32	14.3	61.2	3	12.36	0.393	- 0.04	1223	127	40 Cancri
68	1	50.8	59.3	8	12.57	0.392	- 0.01	1230	142	43 Cancri, γ
3	54	11.7	55.6	7	12.57	2.080	.....	...	...	Radcliffe 2189
47	48	3.0	59.0	4	12.62	0.450	.....	...	...	Σ 1263 (1st star)
47	47	35.5	59.7	4	12.62	0.450	.....	...	...	Σ 1263 (2nd star)
70	27	54.3	54.2	2	12.62	0.385	.....	...	...	Cancri (S)
71	20	1.3	58.0	10	12.67	0.382	+ 0.24	1236	150	47 Cancri, δ
4	45	47.0	56.0	4	12.78	1.731	.....	...	...	Radcliffe 2198
83	4	12.2	55.9	15	12.85	0.353	+ 0.04	1243	164	11 Hydræ, ϵ
27	31	5.2	57.6	5	13.02	0.554	.....	1241	165	5 Ursæ Majoris, b
18	40	6.2	60.0	5	13.04	0.672	.....	...	...	Σ 1280 (1st star)
18	40	2.2	61.2	3	13.04	0.672	.....	...	...	Σ 1280 (2nd star)
73	28	52.8	55.5	4	13.12	0.367	.....	1251	183	52 Cancri
4	58	12.3	57.2	1	13.14	1.585	.....	...	...	Radcliffe 2210
61	13	4.4	57.5	7	13.16	0.393	.....	1253	185	53 Cancri, ρ^1
61	8	12.7	57.7	6	13.17	0.393	+ 0.24	1254	186	55 Cancri, ρ^2
24	51	53.3	60.1	7	13.20	0.570	+ 0.13	1246	178	6 Ursæ Majoris
4	53	53.8	55.7	2	13.24	1.615	.....	...	...	Redhill 1285
5	16	1.2	55.0	4	13.26	1.522	.....	...	...	Radcliffe 2218
86	24	18.8	57.1	3	13.31	0.336	.....	...	...	Hydræ (S)
75	14		...	...	13.34	0.358	.....	...	203	Piazzi viii. 203
86	21		...	...	13.36	0.335	.....	...	...	*
43	50	7.6	58.0	3	13.38	0.441	.....	...	202	Piazzi viii. 202
75	17	11.6	55.0	4	13.42	0.355	.....	...	208	Piazzi viii. 208
97	17		...	...	13.42	0.313	.....	...	...	Lalande 17611
77	50	28.3	58.9	4	13.44	0.350	+ 0.02	1262	211	60 Cancri
97	26	13.3	55.9	3	13.46	0.312	.....	...	215	17 Hydræ (N. star)
97	26	20.2	57.2	4	13.46	0.312	.....	1264	214	17 Hydræ (S. star)
97	26	18.1	54.2	2	13.46	0.312	.....	...	...	17 Hydræ (as one mass)
69	37	1.8	56.1	1	13.47	0.366	.....	...	...	Cancri (T)
98	36	33.9	58.2	3	13.48	0.310		...	...	Hydræ (T)
41	24	42.3	60.0	9	+ 13.52	+ 0.446	+ 0.28	1260	212	9 Ursæ Majoris, ι

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				h. m. s.	1800+		s.	s.	s.
911	5.0	1	65 Cancrī, α	8 50 49.54	61.2	5	+ 3.288	— 0.0098	0.000
912	4.0*	...	10 Ursæ Majoris	8 51 32.30	55.0	5	3.965	— 0.0343	— 0.040
913	...	...	12 Ursæ Majoris, κ ...	8 54 3	...	...	4.138	— 0.0433	— 0.008
914	6.2	6	Piazzi viii. 233	8 54 7.66	58.7	6	3.177	— 0.0070	.....
915	7.9	8.5	Piazzi viii. 236	8 54 25.51	57.0	7	3.177	— 0.0070	.....
916	5.8	2	69 Cancrī, ν	8 54 32.79	58.4	4	3.523	— 0.0172	.....
917	6.9	4	Lacaille 3636	8 55 7.12	58.0	10	2.598	+ 0.0026	.....
918	5.1	1	13 Ursæ Majoris, σ^2 ...	8 58 1.39	55.4	5	5.397	— 0.1339	.....
919	8.0	12	Bradley 1283	8 58 35.20	56.1	10	3.342	— 0.0118	.....
920	4.7	2	15 Ursæ Majoris, f ...	8 58 58.52	56.4	5	4.295	— 0.0537	— 0.014
921	5.4	2	14 Ursæ Majoris, τ ...	8 59 20.27	57.6	2	5.023	— 0.1038	+ 0.011
922	...	...	76 Cancrī, κ	9 0 9.63	61.2	6	3.260	— 0.0094	— 0.002
923	7.3	4	74 Cancrī	9 0 23.65	60.8	5	3.330	— 0.0115	.....
924	6.4	7	75 Cancrī	9 0 32.73	55.9	6	3.557	— 0.0191	— 0.010
925	5.4	4	77 Cancrī, ξ	9 1 18.18	56.9	8	3.464	— 0.0159	— 0.002
926	6.3	1	79 Cancrī	9 2 17.99	59.1	1	3.461	— 0.0159	+ 0.002
927	8.3	11.5	Radcliffe 2273	9 2 50.12	56.0	14	24.162	— 7.1314	.....
928	...	...	16 Ursæ Majoris, c ...	9 3 14.48	57.1	2	4.824	— 0.0917	+ 0.003
929	8.1	2.5	Piazzi ix. 5	9 3 37.01	55.2	5	2.633	+ 0.0028	.....
930	6.9	8	81 Cancrī, π^1	9 4 37.69	57.3	8	3.330	— 0.0117	— 0.037
931	7.6	3.5	*	9 4 49.21	58.2	3	4.313	— 0.0574	.....
932	7.7	3.5	Oeltz. Arg. (N.Z.) 9703	9 4 51.12	58.2	3	4.313	— 0.0574	.....
933	5.9	2	18 Ursæ Majoris, e ...	9 6 5.33	59.2	4	4.366	— 0.0613	+ 0.004
934	6.3	5	Bradley 1300	9 6 37.98	56.2	5	3.720	— 0.0267	— 0.009
935	4.0*	...	22 Hydræ, θ	9 7 4.62	56.3	7	3.118	— 0.0057	+ 0.009
936	7.7	1	Oeltz. Arg. (N.Z.) 9739	9 7 22.79	61.2	1	4.308	— 0.0583	.....
937	5.7	4	82 Cancrī, π^2	9 7 29.83	59.6	5	3.326	— 0.0118	— 0.004
938	7.5	7	20 Ursæ Majoris	9 9 44.51	55.8	5	4.662	— 0.0841	.....
939	6.3	8	Bradley 1306	9 10 59.41	57.8	9	4.217	— 0.0542	.....
940	6.6	16	83 Cancrī	9 11 9.76	57.8	16	3.369	— 0.0134	— 0.012
941	8.3	5	Radcliffe 2295	9 11 55.33	57.0	3	25.734	— 8.8628	.....
942	3.3*	...	40 Lyncis, α	9 12 30.94	55.7	6	3.696	— 0.0267	.....
943	7.2	8	Bradley 1313	9 13 1.70	57.9	12	3.501	— 0.0186	.....
944	8.5	11	Radcliffe 2320	9 16 10.86	58.1	6	12.100	— 1.6059	.....
945	4.6	1	Piazzi ix. 37	9 16 48.69	56.6	5	+ 9.241	— 0.8076	.....

912. Mr. Baily has rejected this designation, which is Flamsteed's.

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
77 36 10.5	61.3	2	+ 13.60	+ 0.347	+ 0.04	1269	222	65 Cancrī, α
47 39 55.6	55.8	8	13.65	0.418	+ 0.27	1268	223	10 Ursæ Majoris
42 17 33.9	57.1	2	13.81	0.431	+ 0.09	1272	230	12 Ursæ Majoris, κ
83 48 46.2	58.8	6	13.81	0.330	.....	...	233	Piazzi viii. 233
83 48 2.7	55.0	4	13.83	0.329	.....	...	236	Piazzi viii. 236
64 59 56.3	60.2	5	13.84	0.366	.....	1275	234	69 Cancrī, ν
116 6 53.6	57.0	6	13.88	0.268	.....	...	...	Lacaille 3636
22 18 4.1	57.1	7	14.06	0.555	.....	1276	241	13 Ursæ Majoris, σ ²
74 10 4.7	55.4	5	14.10	0.341	.....	1283	250	Bradley 1283
37 50 0.4	55.9	5	14.12	0.439	+ 0.04	1280	249	15 Ursæ Majoris, f
25 55 15.5	57.5	3	14.14	0.513	+ 0.08	1279	247	14 Ursæ Majoris, τ
78 46 14.7	61.2	2	14.19	0.330	0.00	1287	255	76 Cancrī, κ
74 43 37.2	60.7	4	14.21	0.337	.....	...	257	74 Cancrī
62 47 38.0	55.2	4	14.22	0.360	+ 0.40	1286	256	75 Cancrī
67 23 25.9	56.3	7	14.26	0.349	- 0.01	1289	259	77 Cancrī, ξ
67 26	...	...	14.32	0.347	+ 0.03	1291	262	79 Cancrī
2 32 5.0	55.7	3	14.36	2.455	.....	...	...	Radcliffe 2273
28 0 14.8	57.2	1	14.38	0.484	+ 0.09	1288	261	16 Ursæ Majoris, c
115 14 11.6	57.8	6	14.41	0.262	.....	...	5	Piazzi ix. 5
74 26 32.1	55.9	6	14.47	0.330	- 0.26	1298	6	81 Cancrī, π ¹
36 43 1.3	60.5	4	14.48	0.429	.....	...	...	*
36 42 50.8	61.3	3	14.48	0.429	.....	...	...	Oeltz. Arg. (N.Z.) 9703
35 24	...	...	14.55	0.432	- 0.06	1297	8	18 Ursæ Majoris, e
54 47 28.2	55.7	6	14.59	0.366	- 0.03	1300	14	Bradley 1300
87 5 48.3	55.4	6	14.61	0.305	+ 0.33	1303	18	22 Hydræ, θ
36 30 19.7	61.3	1	14.63	0.424	.....	...	...	Oeltz. Arg. (N.Z.) 9739
74 28 49.1	59.8	6	14.64	0.325	- 0.02	1304	20	82 Cancrī, π ²
29 37 55.5	57.7	6	14.77	0.453	.....	1302	23	20 Ursæ Majoris
38 9 6.7	56.3	5	14.84	0.407	.....	1306	31	Bradley 1306
71 42 12.4	57.3	9	14.86	0.324	+ 0.16	1309	42	83 Cancrī
2 15 42.2	57.2	5	14.90	2.506	.....	...	...	Radcliffe 2295
55 1 3.2	55.4	6	14.94	0.353	.....	1312	48	40 Lyncis, α
64 14 24.0	55.8	5	14.96	0.333	.....	1313	...	Bradley 1313
5 32 38.8	58.3	8	15.14	1.149	.....	...	...	Radcliffe 2320
8 3 38.6	56.9	5	+ 15.18	+ 0.874	.....	...	37	Piazzi ix. 37

No.	Mag.	Number of Estimations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
946	7.0	13	Bradley 1321	9 16 52.24	56.0	11	+ 3.397	— 0.0148	.....
947	5.9	5	41 Lyncis (1st star) ...	9 19 28.37	55.8	5	3.972	— 0.0427	— 0.001
948	7.9	2	41 Lyncis (2nd star) ...	9 19 31.13	59.2	1	3.972	— 0.0427	.....
949	3.7	1	23 Ursæ Majoris, <i>h</i> ...	9 20 26.95	57.4	5	4.805	— 0.1038	+ 0.011
950	2.0*	...	30 Hydræ, <i>α</i>	9 20 42.43	57.7	15	2.951	— 0.0015	— 0.004
951	6.2	2	W.B. (1) IX. 439	9 20 50.57	59.2	3	2.990	— 0.0024	.....
952	6.3	1	3 Leonis	9 21 2	...	...	3.205	— 0.0085	.....
953	7.5	2	Lalande 18631	9 21 26.88	61.2	1	3.651	— 0.0262	.....
954	6.0	6	22 Ursæ Majoris	9 21 35.89	57.6	5	5.829	— 0.2140	.....
955	7.3	1	31 Hydræ, τ^1 (1st star)	9 22 2.76	58.2	1	3.040	— 0.0037	.....
956	7.7	1	Hydræ, τ^1 (2nd star)	9 22 2	...	...	3.040	— 0.0037	.....
957	9.4	2	Redhill, 1388	9 22 2.68	57.4	2	26.485	— 10.3272	.....
958	6.2	4	7 Leonis Minoris	9 22 14.89	58.2	2	3.650	— 0.0264	.....
959	5.7	5	8 Leonis Minoris	9 23 0.53	58.7	4	3.680	— 0.0280	.....
960	7.9	10	Radcliffe 2343	9 23 12.51	57.4	9	11.715	— 1.5768	.....
961	3.0*	...	25 Ursæ Majoris, θ ...	9 23 28.32	55.9	4	4.164	— 0.0563	— 0.111
962	4.7*	...	4 Leonis, λ	9 23 43.68	56.8	3	3.440	— 0.0172	— 0.004
963	9.2	7	Radcliffe 2346	9 23 59.36	56.7	6	11.613	— 1.5533	.....
964	7.6	5	Piazzi ix. 91	9 24 5.69	58.2	3	5.773	— 0.2112	.....
965	5.5	1	6 Leonis, <i>h</i>	9 24 26.93	61.2	1	3.225	— 0.0092	— 0.002
966	8.8	7	Radcliffe 2350	9 24 45.34	56.6	6	11.540	— 1.5404	.....
967	9.3	4.5	Redhill 1398	9 25 9.17	57.1	4	24.824	— 9.2033	.....
968	7.8	6	Radcliffe 2355	9 25 27.56	54.7	5	10.965	— 1.3615	.....
969	8.3	7.5	Radcliffe 2358	9 26 8.08	55.5	6	11.182	— 1.4397	.....
970	6.0	10	11 Leonis Minoris	9 27 15.15	56.9	7	3.682	— 0.0289	— 0.061
971	6.4	8	33 Hydræ	9 27 33.45	57.5	9	2.996	— 0.0023	— 0.001
972	7.3	8.5	12 Leonis	9 31 9.46	56.3	10	3.466	— 0.0192	.....
973	7.8	16.5	Radcliffe 2368	9 31 33.54	57.0	13	19.796	— 5.8764	.....
974	4.9	3	35 Hydræ, ι	9 32 42.28	57.5	14	3.065	— 0.0041	+ 0.003
975	4.0	2	14 Leonis, σ	9 33 40.46	61.3	8	3.220	— 0.0093	— 0.013
976	6.2	8	15 Leonis, <i>f</i>	9 35 20.38	57.0	5	3.539	— 0.0231	.....
977	5.4	8	16 Leonis, ψ	9 36 6.27	56.3	8	3.278	— 0.0115	— 0.002
978	6.9	7.5	14 Leonis Minoris ...	9 37 44.05	55.6	5	3.871	— 0.0427	.....
979	3.0*	...	17 Leonis, ϵ	9 37 53.89	57.5	9	3.425	— 0.0180	— 0.004
980	6.0	1	18 Leonis	9 38 51	...	...	+ 3.243	— 0.0103	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazz.	Name of Star.
° ' "	1800+		"	"	"			
69 36 35.6	57.4	6	+ 15.18	+ 0.318	.....	1321	...	Bradley 1321
43 47 15.9	56.4	5	15.34	0.367	+ 0.14	} 1325	78	41 Lyncis (1st star)
43 48 35.2	57.6	5	15.34	0.367	.....			41 Lyncis (2nd star)
26 19 45.2	57.1	5	15.39	0.442	- 0.11	1323	82	23 Ursæ Majoris, <i>h</i>
98 3 15.0	55.1	8	15.41	0.269	- 0.03	1330	89	30 Hydræ, <i>a</i>
95 28	...	...	15.41	0.272	.....	...	...	W.B. (1) IX. 439
81 12 10.4	58.5	4	15.42	0.293	.....	1329	90	3 Leonis
55 50 20.1	60.3	3	15.44	0.333	.....	...	...	Lalande 18631
17 10 36.7	59.1	4	15.46	0.535	.....	1322	83	22 Ursæ Majoris
92 9 32.6	61.3	2	15.48	0.276	.....	1334	94	31 Hydræ, τ^1 (1st star)
92 8 26.5	61.3	2	15.48	0.276	.....	...	95	Hydræ, τ^1 (2nd star)
2 5	...	...	15.48	2.449	.....	...	...	Redhill 1388
55 43 51.1	55.5	4	15.49	0.331	.....	1331	92	7 Leonis Minoris
54 16 48.0	60.6	3	15.54	0.333	.....	1333	97	8 Leonis Minoris
5 35 3.0	61.8	2	15.54	1.073	.....	...	...	Radcliffe 2343
37 41 11.6	55.7	1	15.56	0.377	+ 0.57	1332	98	25 Ursæ Majoris, θ
66 25 1.9	55.3	2	15.57	0.310	+ 0.04	1335	100	4 Leonis, λ
5 37 35.6	59.0	2	15.58	1.059	.....	...	...	Radcliffe 2346
17 17 47.4	59.7	3	15.59	0.523	.....	...	91	Piazz i. 91
79 40 8.4	61.2	1	15.61	0.289	+ 0.02	1339	108	6 Leonis, <i>h</i>
5 39 4.9	61.8	2	15.63	1.048	.....	...	...	Radcliffe 2350
2 12 8.5	56.3	1	15.65	2.258	.....	...	...	Redhill 1398
6 2	...	...	15.66	0.986	.....	...	...	Radcliffe 2355
5 51 18.0	56.6	3	15.70	1.007	.....	...	...	Radcliffe 2358
53 33 30.7	56.1	7	15.77	0.325	+ 0.27	1343	118	11 Leonis Minoris
95 17 32.0	56.0	8	15.78	0.263	+ 0.08	1344	123	33 Hydræ
64 0 14.1	56.5	9	15.97	0.300	.....	1351	136	12 Leonis
2 45 41.5	56.1	6	15.99	1.735	.....	...	...	Radcliffe 2368
90 30 33.5	56.3	9	16.05	0.261	+ 0.09	1356	144	35 Hydræ, <i>i</i>
79 28 22.6	61.3	4	16.11	0.273	+ 0.04	1360	151	14 Leonis, <i>o</i>
59 23 1.4	55.4	5	16.19	0.298	.....	1365	157	15 Leonis, <i>f</i>
75 20 23.5	56.0	7	16.23	0.274	+ 0.02	1366	160	16 Leonis, ψ
44 14 15.4	55.5	6	16.31	0.321	.....	1367	162	14 Leonis Minoris
65 34 58.3	58.0	11	16.32	0.283	+ 0.02	1368	164	17 Leonis, ϵ
77 32 49.1	58.2	3	+ 16.37	+ 0.267	.....	1370	168	18 Leonis

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
981	6.0	8	15 Leonis Minoris ...	9 39 32.56	55.6	7	+ 3.888	— 0.0443	+ 0.027
982	6.9	6	19 Leonis	9 39 54.15	58.5	3	3.238	— 0.0103	— 0.007
983	Var.	...	{Bradley 1373 Leonis (R)	9 40 1.53	55.6	9	3.236	— 0.0101	.....
984	4.0	2	29 Ursæ Majoris, v ...	9 41 0.23	57.1	6	4.376	— 0.0824	— 0.033
985	6.9	8.5	23 Leonis	9 43 27.19	55.9	6	3.255	— 0.0110	.....
986	5.6	3	22 Leonis, g	9 43 55.87	56.1	6	3.421	— 0.0186	.....
987	3.9	1	24 Leonis, μ	9 44 47.64	57.1	11	3.446	— 0.0198	— 0.021
988	6.6	9	7 Sextantis	9 44 58.80	57.7	7	3.112	— 0.0055	— 0.013
989	6.5	13	Radcliffe 2404	9 45 34.78	57.4	22	10.883	— 1.6049	.....
990	8.3	9.5	Redhill 1458	9 48 42.33	57.0	10	14.956	— 3.6040	.....
991	7.5	0.5	Bradley 1383	9 48 48	...	...	5.858	— 0.2771	— 0.018
992	8.4	5	Radcliffe 2407	9 49 43.61	56.7	4	23.337	— 10.0795	.....
993	5.4	8	27 Leonis, v	9 50 41.33	58.9	6	3.239	— 0.0106	— 0.004
994	5.0	5	29 Leonis, π	9 52 48.72	58.4	16	3.180	— 0.0081	— 0.003
995	5.0*	...	20 Leonis Minoris ...	9 52 55.67	55.0	5	3.522	— 0.0251	— 0.041
996	7.0	10	13 Sextantis	9 56 53.09	56.7	8	3.119	— 0.0057	.....
997	5.0	2	21 Leonis Minoris ...	9 59 9.69	59.7	2	3.559	— 0.0286	+ 0.006
998	6.7	1	Lacaille 4143	9 59 29.61	55.6	5	2.681	+ 0.0075	.....
999	3.6	1	30 Leonis, η	9 59 41.78	55.4	5	3.283	— 0.0131	— 0.004
1000	1.3*	...	32 Leonis, α	10 0 54.71	57.9	20	3.221	— 0.0102	— 0.019
1001	6.5	1	Groombridge 1616 ...	10 1 22.05	61.3	1	3.866	— 0.0513	.....
1002	6.4	5	Groombridge 1618 ...	10 2 46.91	59.4	5	3.856	— 0.0512	.....
1003	4.0*	...	41 Hydræ, λ	10 3 45.81	55.8	6	2.938	+ 0.0014	— 0.014
1004	6.4	5.5	34 Leonis	10 4 6.21	56.8	7	3.234	— 0.0109	+ 0.001
1005	7.1	6.5	Bradley 1414	10 4 18.13	55.0	5	2.997	— 0.0008	.....
1006	7.3	8.5	20 Sextantis	10 6 46.63	55.0	5	2.998	— 0.0006	.....
1007	6.6	3	Lacaille 4193	10 6 53.25	55.1	5	2.759	+ 0.0068	.....
1008	6.0	1	32 Ursæ Majoris	10 7 49.40	57.2	3	4.471	— 0.1162	— 0.016
1009	5.6	3	23 Leonis Minoris ...	10 8 16.77	57.7	6	3.434	— 0.0226	.....
1010	6.9	6.5	24 Leonis Minoris ...	10 8 31.54	57.9	6	3.424	— 0.0220	.....
1011	3.3*	...	33 Ursæ Majoris, λ ...	10 8 38.46	55.3	4	3.667	— 0.0386	— 0.015
1012	5.9	9.5	Groombridge 1620 ...	10 8 40.46	58.1	11	10.148	— 1.6860	.....
1013	6.3	3	35 Leonis	10 8 46.77	59.4	5	3.353	— 0.0177	.....
1014	5.9	2	37 Leonis	10 9 9.64	59.6	3	3.232	— 0.0110	— 0.002
1015	6.2	5	39 Leonis	10 9 32.12	57.9	5	+ 3.346	— 0.0173	.....

1002. The seconds of R.A., brought up from the Radcliffe Catalogue, are 48^s.74; the seconds of N.P.D. are 11^{''}.9.

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
43 19 44.0	56.0	4	+ 16.40	+ 0.319	+ 0.10	1369	169	15 Leonis Minoris
77 47 10.7	59.4	5	16.42	0.264	- 0.01	1372	175	19 Leonis
77 55 25.5	55.2	5	16.43	0.264	.....	1373	176	{ Bradley 1373 Leonis (R)
30 18 18.8	59.0	5	16.48	0.357	+ 0.18	1371	174	29 Ursæ Majoris, v
76 16 52.7	54.7	6	16.60	0.259	.....	1381	188	23 Leonis
64 56 37.8	57.9	7	16.63	0.272	.....	1382	190	22 Leonis, g
63 20 7.7	56.7	12	16.67	0.272	+ 0.06	1384	194	24 Leonis, μ
86 53 40.7	57.8	4	16.68	0.245	- 0.11	1386	197	7 Sextantis
5 24 41.7	56.8	5	16.70	0.872	.....	...	...	Radcliffe 2404
3 29 24.4	56.3	3	16.85	1.175	.....	...	...	Redhill 1458
14 34 21.6	57.8	2	16.86	0.456	+ 0.02	1383	...	Bradley 1383
2 2 2.2	56.9	3	16.91	1.825	.....	...	...	Radcliffe 2407
76 53 20.6	59.9	6	16.95	0.245	+ 0.01	1395	216	27 Leonis, v
81 17 8.5	58.8	10	17.05	0.237	+ 0.03	1398	225	29 Leonis, π
57 23 22.0	56.0	6	17.05	0.263	+ 0.45	1397	224	20 Leonis Minoris
86 7 9.2	56.3	7	17.23	0.226	.....	1400	238	13 Sextantis
54 4 29.9	57.7	2	17.33	0.254	- 0.01	1401	242	21 Leonis Minoris
120 12 42.3	59.8	6	17.35	0.190	.....	...	...	Lacaille 4143
72 33 21.9	59.1	6	17.36	0.233	0.00	1403	245	30 Leonis, η
77 20 59.4	56.5	16	17.41	0.226	- 0.01	1406	251	32 Leonis, α
39 48	...	...	17.43	0.272	.....	...	...	Groombridge 1616
39 50 21.3	59.4	5	17.49	0.267	.....	...	...	Groombridge 1618
101 39 50.0	56.6	5	17.53	0.201	+ 0.08	1412	2	41 Hydræ, λ
75 57 18.2	57.3	5	17.55	0.221	.....	1411	3	34 Leonis
96 37 42.4	56.0	4	17.55	0.204	.....	1414	6	Bradley 1414
96 41 34.8	57.1	6	17.66	0.200	.....	1419	16	20 Sextantis
116 20 19.6	58.6	5	17.66	0.183	.....	...	...	Lacaille 4193
24 11 44.1	57.4	3	17.70	0.299	+ 0.04	1415	9	32 Ursæ Majoris
59 59 36.3	56.6	3	17.72	0.228	.....	1422	19	23 Leonis Minoris
60 37 7.8	59.6	3	17.73	0.227	.....	1423	21	24 Leonis Minoris
46 23	...	...	17.74	0.242	+ 0.06	1421	20	33 Ursæ Majoris, λ
5 2 27.4	54.3	10	17.74	0.683	.....	1399	252	Groombridge 1620
65 48 8.7	59.8	2	17.74	0.221	.....	1424	24	35 Leonis
75 34 29.8	61.3	1	17.76	0.212	+ 0.02	1426	27	37 Leonis
66 11 34.5	58.9	3	+ 17.77	+ 0.219	.....	1427	28	39 Leonis

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
1016	8.6	5.5	Radcliffe 2463	10 9 42.85	55.3	8	+14.036	— 3.8268	.....
1017	6.5	5	Piazzi x. 31	10 10 19.68	56.0	4	3.682	— 0.0406	.....
1018	5.8	2	40 Leonis	10 12 6.68	56.8	5	3.295	— 0.0147	— 0.019
1019	2.0*	...	41 Leonis, γ^1	10 12 14.91	56.2	9	3.299	— 0.0149	+ 0.019
1020	3.5*	...	Leonis, γ^2	10 12 15.29	55.2	5	3.299	— 0.0149	.....
1021	8.0	7	Radcliffe 2476	10 12 29.80	55.5	7	11.595	— 2.4675	.....
1022	5.3	4	Piazzi x. 22	10 13 39.09	57.6	5	8.141	— 0.9789	.....
1023	3.0*	...	34 Ursæ Majoris, μ ...	10 13 58.46	55.8	5	3.613	— 0.0363	— 0.008
1024	7.6	5	Radcliffe 2483	10 14 16.52	57.3	3	10.029	— 1.7344	.....
1025	6.4	3	42 Leonis	10 14 18.35	58.5	5	3.239	— 0.0117	— 0.004
1026	6.5	1	43 Leonis	10 15 40.75	57.8	3	3.147	— 0.0069	— 0.001
1027	...	...	28 Leonis Minoris ...	10 16 5.22	60.3	1	3.474	— 0.0267	.....
1028	...	...	24 Sextantis	10 16 18.34	57.2	2	3.070	— 0.0031	+ 0.001
1029	5.2	1	30 Leonis Minoris ...	10 17 52.72	57.2	10	3.468	— 0.0266	— 0.005
1030	6.2	6	Bradley 1447	10 18 44.49	57.4	6	3.008	— 0.0003	.....
1031	7.4	7	Bradley 1449	10 19 16.38	57.7	5	3.015	— 0.0006	.....
1032	3.9	1	42 Hydræ, μ	10 19 19.26	56.4	6	2.908	+ 0.0039	— 0.010
1033	6.6	6	Groombridge 1646 ...	10 19 24.26	59.0	4	3.738	— 0.0489	.....
1034	6.8	3	Groombridge 1647 ...	10 19 25	...	...	3.741	— 0.0491	.....
1035	4.3*	...	31 Leonis Minoris, β .	10 19 46.65	56.3	2	3.505	— 0.0298	— 0.010
1036	6.3	1.5	45 Leonis	10 20 15.11	57.8	2	3.176	— 0.0085	— 0.002
1037	7.8	4	Piazzi x. 77	10 20 26.16	56.3	2	3.070	— 0.0030	.....
1038	5.0	1	36 Ursæ Majoris	10 21 38.61	57.9	5	3.919	— 0.0675	.....
1039	8.0	4	Radcliffe 2507	10 24 46.23	54.4	4	9.886	— 1.8817	.....
1040	4.2	4	47 Leonis, ρ	10 25 26.17	58.7	10	3.167	— 0.0081	0.000
1041	5.2	1	37 Ursæ Majoris	10 26 7.11	55.0	5	3.918	— 0.0710	+ 0.012
1042	5.8	1.5	48 Leonis	10 27 29.77	57.2	2	3.143	— 0.0067	— 0.008
1043	6.6	3	Bradley 1472	10 28 18.16	55.9	5	2.857	+ 0.0069	.....
1044	8.0	7	Piazzi x. 116	10 28 45.86	56.7	5	3.143	— 0.0068	.....
1045	6.5	4	Bradley 1458	10 29 27.48	57.0	5	6.379	— 0.5625	+ 0.049
1046	6.3	6.5	38 Leonis Minoris ...	10 31 6.64	55.4	5	3.476	— 0.0308	— 0.021
1047	6.1	4	Groombridge 1669 ...	10 31 47.61	57.7	4	4.392	— 0.1385	.....
1048	5.4	3	38 Ursæ Majoris	10 32 21.28	57.9	3	4.217	— 0.1141	— 0.017
1049	5.4	2	Piazzi x. 126	10 32 39.33	57.3	2	4.419	— 0.1457	.....
1050	6.7	4	33 Sextantis	10 34 16.88	57.0	7	+ 3.063	— 0.0020	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. in N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
3 13 50.0	57.8	2	+ 17.78	+ 0.939	.....	...	...	Radcliffe 2463
45 14 29.0	57.2	4	17.81	0.240	.....	...	31	Piazzi x. 31
69 49 12.0	58.6	3	17.87	0.210	+ 0.20	1431	36	40 Leonis
69 27 6.0	58.0	4	17.88	0.210	+ 0.15	1432	38	41 Leonis, γ^1
69 27 6.8	54.3	2	17.88	0.210	.....	...	...	Leonis, γ^2
4 3 22.8	58.1	3	17.89	0.757	.....	...	...	Radcliffe 2476
6 43 56.1	56.0	3	17.94	0.523	.....	...	22	Piazzi x. 22
47 47 51.9	57.8	4	17.95	0.228	- 0.03	1434	45	34 Ursæ Majoris, μ
4 53 22.4	57.7	2	17.96	0.643	.....	...	...	Radcliffe 2483
74 19 12.9	59.9	3	17.96	0.203	+ 0.02	1436	47	42 Leonis
82 44 52.5	57.3	2	18.01	0.194	+ 0.09	1441	54	43 Leonis
55 35	...	...	18.03	0.213	.....	1440	55	28 Leonis Minoris
90 12	...	...	18.04	0.189	+ 0.03	1442	57	24 Sextantis
55 29 30.8	55.7	6	18.10	0.210	+ 0.08	1445	63	30 Leonis Minoris
96 21 19.7	56.3	4	18.13	0.180	.....	1447	71	Bradley 1447
95 43 0.2	58.8	4	18.15	0.180	.....	1449	...	Bradley 1449
106 7 23.2	58.1	6	18.15	0.173	+ 0.11	1451	74	42 Hydræ, μ
40 28 9.4	60.5	4	18.15	0.224	.....	...	...	Groombridge 1646
40 19 27.7	61.3	3	18.16	0.224	.....	...	...	Groombridge 1647
52 34 35.9	56.3	2	18.17	0.209	+ 0.10	1448	72	31 Leonis Minoris, β
79 31 32.0	59.0	4	18.19	0.188	+ 0.01	1453	76	45 Leonis
90 15 4.2	55.8	4	18.19	0.181	.....	...	77	Piazzi x. 77
33 18 11.0	56.7	7	18.24	0.230	.....	1454	80	36 Ursæ Majoris
4 31 46.0	56.9	4	18.35	0.574	.....	...	...	Radcliffe 2507
79 58 26.4	58.2	8	18.37	0.177	+ 0.03	1467	102	47 Leonis, ρ
32 11 52.0	56.0	6	18.39	0.219	+ 0.03	1464	101	37 Ursæ Majoris
82 19 37.0	57.8	2	18.44	0.172	- 0.06	1468	110	48 Leonis
112 27 19.0	57.0	5	18.47	0.155	.....	1472	...	Bradley 1472
82 14 12.4	57.1	6	18.49	0.170	.....	...	116	Piazzi x. 116
8 50 43.2	58.7	4	18.51	0.350	0.00	1458	...	Bradley 1458
51 21 42.7	56.5	5	18.57	0.184	+ 0.03	1477	122	38 Leonis Minoris
20 49	...	...	18.59	0.232	.....	...	...	Groombridge 1669
23 33 5.9	59.3	2	18.61	0.222	+ 0.10	1476	124	38 Ursæ Majoris
20 11 36.5	59.0	3	18.63	0.232	.....	...	126	Piazzi x. 126
91 0 24.3	57.5	5	+ 18.67	+ 0.155	.....	1482	134	33 Sextantis

1043. The N.P.D. brought up from the B.A.C., is $112^{\circ} 26' 45''.6$.

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
1051	Var.	...	Ursæ Majoris (R)...	10 34 40.96	57.1	10	+ 4.373	- 0.1399	.....
1052	5.6	3	Piazzi x. 135.....	10 35 18.30	57.8	4	3.589	- 0.0427	.....
1053	7.0	0.5	34 Sextantis	10 35 23.50	61.3	3	3.108	- 0.0047	- 0.008
1054	7.7	4	Piazzi x. 137.....	10 35 46.66	54.2	3	3.586	- 0.0426	.....
1055	6.9	2	Bradley 1489	10 37 9.66	58.8	4	2.871	+ 0.0077	.....
1056	...	...	51 Leonis, <i>m</i>	10 38 52	...	...	3.237	- 0.0136	+ 0.005
1057	5.9	9	52 Leonis, <i>k</i>	10 39 0.21	56.6	5	3.195	- 0.0105	- 0.011
1058	8.7	15	Radcliffe 2560	10 41 22.56	56.7	15	8.319	- 1.4539	.....
1059	6.0	6	53 Leonis, <i>l</i>	10 41 53.72	59.2	21	3.161	- 0.0082	- 0.003
1060	3.3*	...	Hydræ, <i>v</i>	10 42 42.96	55.0	5	2.950	+ 0.0049	.....
1061	4.0*	...	46 Leonis Minoris ...	10 45 28.43	56.1	6	3.371	- 0.0258	+ 0.005
1062	5.6	3.5	Hydræ, <i>b</i> ³	10 46 38.71	55.0	5	2.924	+ 0.0070	.....
1063	6.4	8	47 Leonis Minoris ...	10 47 10.71	55.3	7	3.362	- 0.0256	.....
1064	5.6	9	Bradley 1514	10 47 58.64	57.1	5	3.354	- 0.0249	.....
1065	6.2	8	55 Leonis	10 48 30.18	59.7	10	3.083	- 0.0027	+ 0.007
1066	6.4	3	Bradley 1508	10 48 38.11	57.9	3	5.089	- 0.3267	.....
1067	8.5	12	Redhill 1633.....	10 51 9.56	56.0	10	9.183	- 2.1997	.....
1068	5.0*	...	47 Ursæ Majoris	10 51 36.87	55.7	11	3.416	- 0.0325	- 0.028
1069	4.0*	...	7 Crateris, <i>a</i>	10 52 57.38	57.7	5	2.950	+ 0.0065	- 0.033
1070	7.3	3.5	Bradley 1521	10 53 1.88	57.6	3	4.640	- 0.2376	.....
1071	4.7	1	58 Leonis, <i>d</i>	10 53 19.72	61.3	3	3.101	- 0.0039	- 0.002
1072	2.3*	...	48 Ursæ Majoris, β ...	10 53 22.12	57.8	7	3.665	- 0.0636	+ 0.010
1073	5.6	2	59 Leonis, <i>c</i>	10 53 29.29	58.2	2	3.118	- 0.0052	- 0.005
1074	7.6	7	Piazzi x. 212.....	10 53 53.48	54.3	3	3.077	- 0.0021	.....
1075	7.5	6	Radcliffe 2594	10 54 21.80	56.3	5	16.577	- 10.0406	.....
1076	...	...	Radcliffe 2610	10 54 42	...	...	3.794	- 0.0825	.....
1077	2.0*	...	50 Ursæ Majoris, α ...	10 55 3.51	56.2	5	3.790	- 0.0828	- 0.017
1078	7.0	1	Bradley 1531	10 55 38.03	56.1	5	2.890	+ 0.0108	.....
1079	7.5	5	*	10 56 0.67	58.3	5	3.357	- 0.0279	.....
1080	6.8	8	Piazzi x. 225.....	10 56 4.77	55.1	5	3.072	- 0.0016	.....
1081	7.2	13	Radcliffe 2612	10 56 54.66	56.2	14	8.806	- 2.1708	.....
1082	7.7	8	51 Leonis Minoris ...	10 57 46.97	55.7	5	3.246	- 0.0172	.....
1083	5.0	1	63 Leonis, χ	10 57 47.60	57.1	13	3.123	- 0.0057	- 0.024
1084	5.5	8	65 Leonis, <i>p</i> ³	10 59 45.70	56.0	7	3.089	- 0.0028	- 0.028
1085	4.0	1	11 Crateris, β	11 4 46.62	56.8	11	+ 2.943	+ 0.0096	+ 0.002

1079. This star is very near to, but not identical with, Lalande 21185.

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
29 29 29.7	54.9	5	+ 18.68	+ 0.224	.....	...	...	Ursæ Majoris, (R)
43 3 42.1	59.8	6	18.70	0.182	.....	...	135	Piazzi x. 135
85 41 11.8	57.8	2	18.71	0.156	- 0.01	1484	138	34 Sextantis
43 3 30.5	60.3	4	18.72	0.180	.....	...	137	Piazzi x. 137
112 49 2.9	57.0	5	18.73	0.143	.....	1489	...	Bradley 1489
70 22 17.3	57.2	1	18.82	0.156	+ 0.04	1492	149	51 Leonis, <i>m</i>
75 4 1.4	55.9	7	18.82	0.153	+ 0.08	1494	152	52 Leonis, <i>k</i>
4 53 55.7	56.5	5	18.89	0.400	.....	...	...	Radcliffe 2560
78 42 53.2	59.1	9	18.90	0.146	+ 0.02	1500	162	53 Leonis, <i>l</i>
105 27 45.2	55.8	5	18.93	0.135	.....	1504	167	Hydræ, <i>v</i>
55 1 51.8	55.5	6	19.01	0.149	+ 0.24	1509	181	46 Leonis Minoris
109 23 9.2	56.1	6	19.03	0.127	.....	1513	183	Hydræ, <i>b</i> ³
55 13 7.7	55.9	5	19.06	0.145	.....	1511	184	47 Leonis Minoris
55 44 47.2	55.7	5	19.08	0.143	+ 0.06	1514	187	Bradley 1514
88 31 3.4	59.0	7	19.09	0.130	0.00	1517	193	55 Leonis
11 28 53.0	57.6	3	19.10	0.219	.....	1508	...	Bradley 1508
3 42 11.1	56.2	6	19.16	0.388	.....	...	...	Redhill 1633
48 49 22.4	56.5	5	19.17	0.138	.....	1522	202	47 Ursæ Majoris
107 33 15.1	56.8	2	19.20	0.117	- 0.14	1525	209	7 Crateris, <i>a</i>
13 48 23.7	58.3	2	19.20	0.187	.....	1521	...	Bradley 1521
85 37 53.1	57.3	1	19.21	0.122	+ 0.03	1526	210	58 Leonis, <i>d</i>
32 52 4.5	59.1	6	19.22	0.145	- 0.03	1523	207	48 Ursæ Majoris, <i>β</i>
83 8 49.6	59.8	4	19.22	0.122	+ 0.06	1527	211	59 Leonis, <i>c</i>
89 12 9.9	57.1	6	19.23	0.120	.....	...	212	Piazzi x. 212
1 36 6.7	59.8	2	19.24	0.675	.....	...	...	Radcliffe 2594
27 35 29.8	61.8	2	19.24	0.148	.....	...	214	Radcliffe 2610
27 29 38.6	56.6	16	19.26	0.146	+ 0.09	1528	217	50 Ursæ Majoris, <i>a</i>
116 4 28.9	56.1	4	19.27	0.110	.....	1531	222	Bradley 1531
53 5 26.1	58.3	2	19.28	0.128	.....	...	...	*
89 59 43.9	56.3	4	19.28	0.115	.....	...	225	Piazzi x. 225
3 36 8.6	57.8	3	19.30	0.339	.....	...	...	Radcliffe 2612
64 2 28.6	55.5	5	19.32	0.119	.....	1534	234	51 Leonis Minoris
81 54 29.3	57.3	9	19.32	0.114	+ 0.08	1535	236	63 Leonis, <i>χ</i>
87 17 5.8	55.9	6	19.37	0.109	+ 0.08	1539	243	65 Leonis, <i>p</i> ³
112 3 43.7	55.8	6	+ 19.48	+ 0.095	+ 0.10	1545	6	11 Crateris, <i>β</i>

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.			Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h.	m.	s.	1800+		s.	s.	s.
1086	7.2	10	Piazzi xi. 9	11	6	19.65	54.8	6	+ 3.191	— 0.0131	.....
1087	5.6	2	69 Leonis, <i>p</i> ⁵	11	6	35.56	57.9	3	3.076	— 0.0014	0.000
1088	2.3*	...	68 Leonis, δ	11	6	39.39	57.4	10	3.192	— 0.0133	+ 0.011
1089	...	...	70 Leonis, θ	11	6	54	...	...	3.161	— 0.0100	— 0.005
1090	5.7	1	73 Leonis, <i>n</i>	11	8	32.30	59.1	1	3.147	— 0.0086	— 0.001
1091	4.5	1	74 Leonis, ϕ	11	9	32.85	60.3	1	3.057	+ 0.0006	— 0.009
1092	5.5	4	75 Leonis	11	10	5.07	57.0	5	3.086	— 0.0023	+ 0.005
1093	4.0*	...	Ursæ Majoris, ξ^1 ...	11	10	42.41	57.1	5	3.253	— 0.0215	— 0.037
1094	...	...	53 U. Maj., ξ (as a mass)	11	10	42	...	...	3.253	— 0.0215	— 0.037
1095	4.9*	...	53 Ursæ Majoris, ξ^2 ...	11	10	42.61	57.3	4	3.253	— 0.0215	— 0.037
1096	7.4	3.5	Piazzi xi. 32	11	11	7.27	58.0	6	3.050	+ 0.0013	.....
1097	3.3*	...	12 Crateris, δ	11	12	20.59	56.7	9	3.003	+ 0.0063	— 0.009
1098	7.3	5.5	Piazzi xi. 41	11	13	46.08	56.5	5	3.099	— 0.0036	.....
1099	4.0*	...	77 Leonis, σ	11	13	54.95	55.9	5	3.104	— 0.0042	— 0.009
1100	6.9	8	Piazzi xi. 44	11	14	15.12	56.5	5	3.107	— 0.0046	.....
1101	5.9	6	13 Crateris, λ	11	16	25.82	55.1	5	2.990	+ 0.0084	.....
1102	4.3	1	78 Leonis, ι	11	16	37.42	56.2	11	3.122	— 0.0066	.....
1103	...	...	14 Crateris, ϵ	11	17	32.45	57.8	2	3.028	+ 0.0046	— 0.003
1104	7.0	4.5	80 Leonis	11	18	38.36	57.6	6	3.092	— 0.0028	.....
1105	7.2	5	83 Leonis (1st star) ...	11	19	40.13	57.9	5	3.087	— 0.0023	— 0.057
1106	7.9	6	83 Leonis (2nd star) ...	11	19	40.93	57.1	6	3.087	— 0.0023	— 0.057
1107	7.1	10.5	Radcliffe 2684	11	20	32.13	57.6	13	5.969	— 1.0755	.....
1108	5.0	4	84 Leonis, τ	11	20	44.22	57.3	10	3.086	— 0.0022	— 0.001
1109	6.4	6	58 Ursæ Majoris	11	22	55.83	56.5	5	3.279	— 0.0325	— 0.004
1110	...	...	87 Leonis, <i>e</i>	11	23	9.76	57.9	3	3.064	+ 0.0010	— 0.001
1111	7.7	8	Piazzi xi. 92	11	24	11.35	56.3	4	3.086	— 0.0021	.....
1112	7.1	7	Radcliffe 2705	11	24	16.77	55.5	7	6.361	— 1.4629	.....
1113	6.7	5.5	88 Leonis	11	24	31.17	58.0	4	3.128	— 0.0084	— 0.022
1114	6.9	3	Piazzi xi. 94	11	24	49.48	56.3	2	3.051	+ 0.0028	.....
1115	6.5*	...	Piazzi xi. 95	11	25	20.34	55.2	3	2.963	+ 0.0148	.....
1116	5.0*	...	Bradley 1578	11	25	20.34	56.3	2	2.963	+ 0.0148	.....
1117	6.1	13	89 Leonis	11	27	12.01	56.8	6	3.085	— 0.0019	— 0.012
1118	5.6	1	2 Draconis	11	27	47.99	57.7	5	3.590	— 0.1094	+ 0.016
1119	4.7*	...	91 Leonis, <i>v</i>	11	29	46.87	57.7	8	3.072	+ 0.0002	— 0.003
1120	6.1	4	59 Ursæ Majoris	11	30	52.22	56.5	5	+ 3.238	— 0.0322	— 0.017

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	+1800		"	"	"			
69 6 16.4	55.1	5	+ 19.51	+ 0.100	.....	...	9	Piazzi xi. 9
89 18 29.4	57.6	3	19.51	0.095	0.00	1547	11	69 Leonis, p^5
68 42 34.2	58.4	8	19.52	0.099	+ 0.14	1546	10	68 Leonis, δ
73 48 22.0	57.3	2	19.52	0.098	+ 0.06	1548	13	70 Leonis, θ
75 55 44.9	58.3	2	19.55	0.094	+ 0.04	1550	20	73 Leonis, n
92 53 12.0	61.3	2	19.57	0.089	+ 0.04	1551	23	74 Leonis, ϕ
87 13 12.4	59.8	4	19.58	0.089	+ 0.19	1552	24	75 Leonis
57 40 59.0	56.3	3	19.59	0.093	+ 0.59	1553	28	Ursæ Majoris, ξ^1
57 41 0.2	61.3	2	19.59	0.093	+ 0.59	...	...	53 U. Maj., ξ (as a mass)
57 41 2.2	58.3	2	19.59	0.093	+ 0.59	...	...	53 Ursæ Majoris, ξ^2
94 17 50.9	59.8	4	19.59	0.087	.....	...	32	Piazzi xi. 32
104 1 18.1	57.3	7	19.62	0.082	- 0.18	1557	38	12 Crateris, δ
84 21 8.8	58.9	5	19.65	0.083	.....	...	41	Piazzi xi. 41
83 12 14.9	59.0	4	19.65	0.083	+ 0.03	1558	42	77 Leonis, σ
82 35 55.5	55.6	4	19.66	0.082	.....	...	44	Piazzi xi. 44
108 0 39.5	58.1	5	19.70	0.074	.....	1561	53	13 Crateris, λ
78 41 59.7	55.3	4	19.70	0.077	.....	1560	54	78 Leonis, ι
100 5 32.1	59.7	3	19.71	0.073	- 0.04	1653	58	14 Crateris, ϵ
85 22 10.2	59.5	5	19.73	0.072	.....	1567	67	80 Leonis
86 13 28.5	58.4	8	19.75	0.070	- 0.17	1568	70	83 Leonis (1st star)
86 13 53.7	59.9	5	19.75	0.070	- 0.17	...	71	83 Leonis (2nd star)
4 31 22.4	57.6	3	19.76	0.140	.....	...	...	Radcliffe 2684
86 22 24.0	58.0	10	19.76	0.068	+ 0.02	1570	76	84 Leonis, τ
46 3 30.6	57.3	5	19.79	0.069	- 0.07	1574	87	58 Ursæ Majoris
92 13 53.5	57.3	2	19.80	0.063	+ 0.03	1576	89	87 Leonis, e
86 9 57.1	56.3	5	19.81	0.061	.....	...	92	Piazzi xi. 92
3 37	...	...	19.81	0.135	.....	...	...	Radcliffe 2705
74 51 23.0	57.0	6	19.82	0.062	+ 0.19	1577	93	88 Leonis
95 41 43.4	56.5	5	19.82	0.060	.....	...	94	Piazzi xi. 94
118 29 48.9	57.3	2	19.83	0.057	.....	...	95	Piazzi xi. 95
118 30	...	...	19.83	0.057	.....	1578	96	Bradley 1578
86 9 45.5	56.4	7	19.85	0.056	+ 0.11	1582	106	89 Leonis
19 53 55.3	57.0	6	19.86	0.065	+ 0.10	1581	107	2 Draconis
90 3 4.2	58.0	6	19.88	0.050	- 0.03	1586	116	91 Leonis, v
45 35 55.0	56.5	5	+ 19.90	+ 0.051	+ 0.06	1588	122	59 Ursæ Majoris

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
1121	5.8	4	24 Crateris, ι	11 31 33.61	57.2	8	+ 3.036	+ 0.0066	.....
1122	6.5	2	61 Ursæ Majoris.....	11 33 40.24	56.7	5	3.179	- 0.0219	0.000
1123	5.7	1	62 Ursæ Majoris.....	11 34 16.70	57.1	5	3.167	- 0.0200	.....
1124	5.6	2	Bradley 1597	11 34 44.91	57.3	3	2.981	+ 0.0177	.....
1125	7.7	4.5	Piazzi xi. 144	11 34 57.67	58.5	5	3.086	- 0.0024	.....
1126	9.2	7	Groombridge 1818 ...	11 35 5.31	55.7	7	4.502	- 0.5653	.....
1127	9.1	9	Radcliffe 2734.....	11 35 5.50	55.3	7	5.214	- 1.0511	.....
1128	8.1	8	Radcliffe 2738.....	11 36 51.29	56.2	7	5.160	- 1.0873	.....
1129	5.0	1	2 Virginis, ξ	11 38 3.98	56.6	7	3.092	- 0.0041	+ 0.002
1130	4.3*	...	3 Virginis, ν	11 38 39.78	55.3	6	3.088	- 0.0032	+ 0.001
1131	6.3	8	Bradley 1604	11 41 26.43	56.7	5	3.101	- 0.0074	.....
1132	2.0*	...	94 Leonis, β	11 41 54.98	58.2	15	3.101	- 0.0075	- 0.036
1133	9.9	9	Radcliffe 2749.....	11 42 32.96	55.1	5	3.154	- 0.0243	.....
1134	3.3*	...	5 Virginis, β	11 43 24.20	56.1	11	3.076	- 0.0004	+ 0.048
1135	6.0	3	Lacaille 4913	11 44 37.27	57.7	5	3.020	+ 0.0176	.....
1136	9.5	2	*	11 44 50	...	...	3.143	- 0.0240	.....
1137	6.7	18	Groombridge 1830 ...	11 44 53.89	57.6	13	3.143	- 0.0240	[+ 0.344]
1138	2.3*	...	64 Ursæ Majoris, γ ...	11 46 27.25	57.1	6	3.183	- 0.0437	+ 0.011
1139	7.5	5.5	Piazzi xi. 179	11 46 42.66	56.1	5	3.068	+ 0.0027	.....
1140	9.2	7	Radcliffe 2759.....	11 46 49.51	55.1	5	3.134	- 0.0237	.....
1141	7.5	0.5	Piazzi xi. 180	11 46 53.60	58.6	4	3.080	- 0.0019	.....
1142	9.6	9	W.B. (2) XI. 913-4.	11 47 8.46	56.4	8	3.132	- 0.0239	.....
1143	6.0	3	Lacaille 4933	11 47 35.31	59.0	3	3.039	+ 0.0147	.....
1144	7.3	1	Piazzi xi. 182	11 47 40.58	58.3	2	3.071	+ 0.0015	.....
1145	...	...	Lacaille 4945	11 49 57.53	57.8	4	3.034	+ 0.0199	.....
1146	7.0	1	Lalande 22538	11 51 2.77	60.3	1	3.073	+ 0.0007	.....
1147	10.2	11	Radcliffe 2774.....	11 51 38.56	55.6	9	4.325	- 1.3940	.....
1148	6.5	8.5	Piazzi xi. 207	11 51 53.66	56.4	6	3.073	+ 0.0007	.....
1149	8.2	7.5	Radcliffe 2775.....	11 51 58.36	57.3	11	4.277	- 1.3690	.....
1150	5.9	4	7 Virginis, b	11 52 46.69	58.0	6	3.075	- 0.0008	- 0.002
1151	5.0	1	8 Virginis, π	11 53 42	...	...	3.077	- 0.0023	0.000
1152	7.6	4.5	Piazzi xi. 214.....	11 54 0.29	58.1	6	3.075	- 0.0008	.....
1153	9.1	2	W.B. (2) XI. 1065...	11 54 20	...	...	3.103	- 0.0277	.....
1154	5.5	5	67 Ursæ Majoris.....	11 54 59.62	58.3	4	3.100	- 0.0277	- 0.032
1155	8.5	2	Radcliffe 2787.....	11 55 9.75	58.3	2	+ 3.099	- 0.0277	.....

1137. The proper motions in R.A. and N.P.D. are those given in the Radcliffe Catalogue.

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
102 25 54.7	57.3	6	+ 19.91	+ 0.047	.....	1591	128	24 Crateris, ϵ
55 0 26.3	55.9	5	19.92	0.045	+ 0.41	1593	135	61 Ursæ Majoris
57 28 44.0	59.3	5	19.93	0.043	.....	1596	138	62 Ursæ Majoris
121 43 21.2	61.3	2	19.93	0.040	.....	1597	141	Bradley 1597
84 28 40.7	59.1	4	19.94	0.041	.....	...	144	Piazzi xi. 144
5 47	...	...	19.94	0.062	.....	...	...	Groombridge 1818
3 52 17.6	58.4	2	19.94	0.073	.....	...	...	Radcliffe 2734
3 41 26.5	60.0	4	19.95	0.067	.....	...	...	Radcliffe 2738
80 57 48.8	55.5	5	19.96	0.035	+ 0.02	1599	151	2 Virginis, ξ
82 41 10.6	55.3	6	19.97	0.033	+ 0.21	1601	153	3 Virginis, ν
74 56 18.9	57.0	6	19.99	0.028	.....	1604	160	Bradley 1604
74 38 43.9	57.8	6	19.99	0.027	+ 0.10	1605	163	94 Leonis, β
51 18 51.7	56.5	5	20.00	0.026	.....	...	...	Radcliffe 2749
87 26 47.7	56.1	5	20.00	0.024	+ 0.28	1606	166	5 Virginis, β
120 2 43.3	59.5	6	20.01	0.022	.....	...	...	Lacaille 4913
51 16 2.9	57.3	2	20.01	0.021	.....	...	...	*
51 16 37.9	56.3	12	20.01	0.022	[+ 5.70]	...	...	Groombridge 1830
35 31 37.2	58.4	4	20.02	0.019	0.00	1608	174	64 Ursæ Majoris, γ
92 59 47.8	59.3	3	20.02	0.017	.....	...	179	Piazzi xi. 179
51 16 1.0	58.3	3	20.02	0.017	.....	...	...	Radcliffe 2759
84 20 36.1	60.4	2	20.02	0.017	.....	...	180	Piazzi xi. 180
51 10 56.0	56.4	3	20.02	0.017	.....	...	...	W.B. (2) XI. 913-4
114 56 16.8	59.3	2	20.02	0.015	.....	...	...	Lacaille 4933
90 39	...	...	20.02	0.015	.....	...	182	Piazzi xi. 182
122 32	...	...	20.03	0.010	.....	...	...	Lacaille 4945
88 21	...	...	20.04	0.007	.....	...	...	Lalande 22538
2 13 31.5	56.3	5	20.04	0.014	.....	...	...	Radcliffe 2774
88 41 28.4	55.5	5	20.04	0.007	.....	...	207	Piazzi xi. 207
2 13 34.6	57.3	5	20.04	0.013	.....	...	...	Radcliffe 2775
85 33 53.6	57.0	8	20.05	0.006	+ 0.02	1617	208	7 Virginis, b
82 36 18.6	61.3	1	20.05	0.004	+ 0.04	1618	211	8 Virginis, π
85 35 13.9	57.2	5	20.05	0.004	.....	...	214	Piazzi xi. 214
46 10 39.1	60.4	2	20.05	0.002	.....	...	...	W.B. (2) XI. 1065
46 10 39.4	58.7	7	20.05	0.001	- 0.05	1621	217	67 Ursæ Majoris
46 4 47.2	57.3	2	+ 20.05	+ 0.001	.....	...	...	Radcliffe 2787

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
1156	6.8	6	Piazzi xi. 218	11 55 22.41	57.3	3	+ 3.097	- 0.0277	.....
1157	9.1	5	Groombridge 1848 ...	11 56 7.29	56.7	6	3.294	- 0.3325	.....
1158	7.1	4.5	Piazzi xi. 222	11 56 35.70	57.3	5	3.074	- 0.0017	.....
1159	6.4	6	Groombridge 1850 ...	11 57 37.98	57.9	6	3.286	- 0.5335	.....
1160	4.0*	...	9 Virginis, θ	11 58 4.64	56.6	6	3.074	- 0.0032	- 0.013
1161	7.5	8	Piazzi xi. 237	12 0 4.54	56.9	5	3.071	+ 0.0050	.....
1162	4.5	1	1 Corvi, α	12 1 11.90	57.5	5	3.075	+ 0.0153	+ 0.005
1163	6.2	3	10 Virginis	12 2 30.84	59.5	6	3.071	+ 0.0006	+ 0.001
1164	3.0*	...	2 Corvi, ϵ	12 2 55.80	58.5	6	3.079	+ 0.0141	- 0.005
1165	8.4	2	Oeltz. Arg. (N.Z.) 12417	12 3 41.66	58.4	1	3.014	- 0.0747	.....
1166	7.0	8	Bradley 1633	12 5 10.49	57.9	5	2.927	- 0.1272	.....
1167	5.2	2	Bradley 1634	12 5 35.75	57.6	3	2.913	- 0.1280	+ 0.007
1168	7.7	8	Radcliffe 2815	12 6 50.04	56.1	8	2.075	- 0.2592	.....
1169	8.0	5.5	Groombridge 1860 ...	12 7 0.94	56.0	5	2.663	- 0.2163	.....
1170	7.0	4	Piazzi xii. 17	12 7 5.12	58.5	6	3.076	+ 0.0049	.....
1171	4.5*	...	69 Ursæ Majoris, δ ...	12 8 28.81	58.9	5	2.994	- 0.0429	+ 0.015
1172	2.0*	...	4 Corvi, γ	12 8 36.58	57.0	7	3.087	+ 0.0114	- 0.012
1173	7.7	7.5	Bradley 1642 (1st star)	12 10 1.04	57.9	5	2.707	- 0.1395	.....
1174	7.4	7.5	Bradley 1642 (2nd star)	12 10 4.61	57.9	5	2.707	- 0.1395	.....
1175	6.4	3	13 Virginis	12 11 29.66	60.0	3	3.072	+ 0.0026	0.000
1176	6.6	4	9 Comæ	12 12 28.56	58.7	3	3.032	- 0.0135	.....
1177	5.9	3	Bradley 1650	12 12 30.83	58.4	4	2.780	- 0.0937	.....
1178	6.6	4	Groombridge 1871 ...	12 12 43.35	57.7	4	1.546	- 0.0008	[+ 0.325]
1179	3.3*	...	15 Virginis, η	12 12 44.61	56.4	8	3.072	+ 0.0026	- 0.007
1180	6.7	1.5	10 Comæ	12 12 47.93	56.3	2	3.030	- 0.0137	.....
1181	5.0	1	16 Virginis, ϵ	12 13 14.35	54.9	6	3.067	+ 0.0005	- 0.019
1182	6.0	1	70 Ursæ Majoris	12 14 2.88	58.3	1	+ 2.938	- 0.0422	+ 0.004
1183	6.5	5	Groombridge 1884 ...	12 14 22.09	58.0	4	- 0.074	+ 1.1782	.....
1184	7.5	7	Groombridge 1879 ...	12 15 3.95	57.0	9	+ 2.215	- 0.1255	.....
1185	6.6	3.5	17 Virginis	12 15 24.90	57.9	5	3.062	- 0.0004	.....
1186	6.6	3	Lalande 23228-9	12 17 59	...	...	3.092	+ 0.0087	.....
1187	8.3	6	Groombridge 1889 ...	12 18 10.75	56.7	6	1.986	- 0.0859	.....
1188	6.1	5.5	Piazzi xii. 75	12 18 12.28	57.5	6	3.023	- 0.0104	.....
1189	8.3	6	Groombridge 1892 ...	12 19 27.72	56.9	5	1.954	- 0.0764	.....
1190	7.2	5	72 Ursæ Majoris	12 19 49.70	57.2	5	+ 2.902	- 0.0363	.....

1178. The proper motion in R.A. is taken from the Radcliffe Catalogue.

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
46 6 58.6	59.7	5	+ 20.05	0.000	.....	...	218	Piazzi xi. 218
5 50 19.8	55.9	1	20.05	- 0.001	.....	...	...	Groombridge 1848
83 39 34.8	56.1	4	20.05	0.001	.....	...	222	Piazzi xi. 222
3 38 14.7	58.4	1	20.06	0.004	.....	...	...	Groombridge 1850
80 29 21.1	57.5	5	20.06	0.005	- 0.02	1623	228	9 Virginis, α
95 59 14.1	55.8	6	20.06	0.008	.....	...	237	Piazzi xi. 237
113 56 52.0	56.6	4	20.06	0.011	+ 0.05	1624	241	1 Corvi, α
87 18 56.6	57.4	8	20.05	0.014	+ 0.21	1625	246	10 Virginis
111 50 26.7	56.9	7	20.05	0.014	- 0.01	1626	248	2 Corvi, ϵ
20 30 55.8	61.4	1	20.05	0.016	.....	...	...	Oeltz. Arg. (N.Z.) 12417
11 46 50.9	59.0	3	20.05	0.019	.....	1633	...	Bradley 1633
11 36 21.2	58.3	2	20.05	0.019	- 0.03	1634	...	Bradley 1634
2 17 17.6	58.3	2	20.05	0.018	.....	...	...	Radcliffe 2815
5 43 8.2	58.4	3	20.05	0.021	.....	...	...	Groombridge 1860
94 56 33.4	59.3	4	20.05	0.022	.....	...	17	Piazzi xii. 17
32 11 21.1	58.7	3	20.04	0.025	+ 0.04	1637	22	69 Ursæ Majoris, δ
106 45 52.3	56.3	4	20.04	0.025	- 0.02	1638	24	4 Corvi, γ
9 5 59.0	59.9	5	20.04	0.026	.....	...	...	Bradley 1642 (1st star)
9 5 46.6	60.3	5	20.04	0.026	.....	1642	...	Bradley 1642 (2nd star)
90 0 31.2	57.4	1	20.03	0.031	+ 0.04	1643	38	13 Virginis
61 3 36.9	57.8	4	20.03	0.032	- 0.02	1646	43	9 Comæ
14 3 46.5	61.3	1	20.03	0.031	.....	1650	45	Bradley 1650
2 47 8.6	59.2	3	20.03	0.022	.....	1656	...	Groombridge 1871
89 53 17.8	56.0	4	20.03	0.034	+ 0.03	1647	44	15 Virginis, η
60 45 29.0	58.3	2	20.03	0.034	.....	1648	46	10 Comæ
85 54 27.5	56.1	4	20.02	0.035	+ 0.08	1652	50	16 Virginis, ϵ
31 21 23.0	60.0	3	20.02	0.035	+ 0.06	1655	56	70 Ursæ Majoris
1 31 28.8	57.2	3	20.02	0.008	.....	1672	...	Groombridge 1884
5 50 57.1	58.9	2	20.01	0.030	.....	...	...	Groombridge 1879
83 54 55.9	56.3	3	20.01	0.038	.....	1657	58	17 Virginis
100 50 1.1	58.0	3	19.99	0.044	.....	...	...	Lalande 23228-9
5 34 13.8	57.7	4	19.99	0.032	.....	...	...	Groombridge 1889
65 17 45.6	57.9	5	19.99	0.044	.....	...	75	Piazzi xii. 75
5 47 44.3	57.9	4	19.98	0.033	.....	...	...	Groombridge 1892
34 3 56.7	57.8	4	+ 19.98	- 0.046	.....	1668	83	72 Ursæ Majoris

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
1191	4.3*	...	15 Comæ, γ	12 19 57.39	57.7	7	+ 3.007	− 0.0128	− 0.008
1192	7.0	5.5	Bradley 1669	12 20 37.95	57.9	5	3.012	− 0.0114	.....
1193	8.1	2	Corvi, δ ¹	12 22 36.53	57.3	2	3.109	+ 0.0117	.....
1194	2.3*	...	7 Corvi, δ ²	12 22 37.43	58.9	6	3.109	+ 0.0117	− 0.007
1195	6.2	4	20 Comæ	12 22 41.06	58.1	4	3.020	− 0.0083	.....
1196	6.7	2	Piazzi xii. 104	12 22 52.06	59.3	4	3.102	+ 0.0100	.....
1197	5.7	5.5	Piazzi xii. 105	12 22 58.01	59.0	3	3.129	+ 0.0163	.....
1198	6.3	1	7 Canum Venat.	12 23 24.89	58.0	4	2.895	− 0.0310	.....
1199	5.2	3	4 Draconis.....	12 23 57.30	58.3	2	2.689	− 0.0578	.....
1200	6.5	2	Piazzi xii. 111	12 24 26.51	57.4	1	3.083	+ 0.0055	.....
1201	...	...	8 Corvi, η	12 24 51.55	57.3	2	3.112	+ 0.0117	− 0.033
1202	7.5	2	Oeltz.Arg.(N.Z.) 12731	12 25 44.24	58.3	2	2.676	− 0.0547	.....
1203	7.0	1	Piazzi xii. 118	12 26 26.73	59.3	1	3.049	− 0.0010	.....
1204	5.8	3	21 Virginis, q	12 26 33.36	58.1	5	3.096	+ 0.0080	− 0.009
1205	2.5*	...	9 Corvi, β.....	12 27 2.28	59.8	7	3.138	+ 0.0163	− 0.008
1206	4.1	1	8 Canum Venat., β ...	12 27 5.21	55.1	5	2.930	− 0.0208	− 0.069
1207	7.4	3	Piazzi xii. 127	12 27 23.59	58.7	3	3.048	− 0.0010	.....
1208	4.0	1	5 Draconis, κ	12 27 29.23	58.0	3	2.619	− 0.0556	− 0.012
1209	4.5	1	23 Comæ	12 27 52.34	58.3	3	3.002	− 0.0088	.....
1210	6.9	3.5	24 Comæ (1st star) ...	12 28 4.82	58.9	4	3.016	− 0.0064	.....
1211	5.3	2.5	24 Comæ (2nd star)...	12 28 6.23	58.1	3	3.016	− 0.0064	.....
1212	7.3	1	W.B. (2) XII. 603 ...	12 28 20.15	60.4	2	2.947	− 0.0172	.....
1213	5.3	2	6 Draconis	12 28 47.33	58.3	2	2.591	− 0.0552	.....
1214	6.0	2	25 Virginis, f	12 29 34.83	57.4	2	3.087	+ 0.0062	− 0.004
1215	7.1	4.5	Bradley 1693	12 30 2.33	58.0	3	3.043	− 0.0014	.....
1216	Var.	...	Virginis (R).....	12 31 23.74	55.3	3	3.047	− 0.0003	.....
1217	5.1	7	26 Virginis, χ	12 32 1.39	59.2	12	3.096	+ 0.0075	− 0.006
1218	8.8	6.5	Piazzi xii. 147	12 32 9.06	58.0	4	3.096	+ 0.0076	.....
1219	10.0	4	*	12 32 34.67	57.9	2	2.571	− 0.0582	.....
1220	3.5	1	29 Virginis, γ (N. star)	12 34 34.09	57.2	7	3.074	+ 0.0042	.....
1221	3.8	1	29 Virginis, γ (S. star)	12 34 34.13	57.9	9	3.074	+ 0.0042	.....
1222	7.0	1	28 Virginis	12 34 43	...	...	3.096	+ 0.0074	+ 0.001
1223	9.3	2	Oeltz.Arg.(N.Z.) 12906	12 35 15.34	58.4	2	2.530	− 0.0465	.....
1224	9.5	2	Oeltz.Arg.(N.Z.) 12910	12 35 18.97	57.3	1	2.525	− 0.0465	.....
1225	7.4	9	Groombridge 1923 ...	12 37 17.25	57.6	11	+ 0.859	+ 0.1378	.....

1212. The R.A. corresponds to W.B. (2) XII. 603, and the N.P.D. to W.B. (2) XII. 602.

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
60 57 9.0	55.6	5	+ 19.98	- 0.047	+ 0.10	1666	84	15 Comæ, γ
63 18 43.3	57.8	4	19.98	0.049	.....	1669	...	Bradley 1669
105 44 30.2	61.3	2	19.96	0.053	.....	...	...	Corvi, δ^1
105 44 9.3	57.8	6	19.96	0.053	+ 0.15	1675	101	7 Corvi, δ^2
68 19 41.1	58.3	2	19.96	0.052	.....	1676	102	20 Comæ
102 37 3.1	59.4	4	19.96	0.053	.....	...	104	Piazzi xii. 104
112 55 19.9	60.6	3	19.96	0.054	.....	...	105	Piazzi xii. 105
37 41 27.9	57.3	1	19.95	0.051	.....	1677	106	7 Canum Venat.
20 1 23.6	56.1	8	19.95	0.050	+ 0.09	1680	110	4 Draconis
94 16 48.5	58.4	2	19.95	0.056	.....	...	111	Piazzi xii. 111
105 25 15.3	57.3	1	19.94	0.058	+ 0.06	1681	115	8 Corvi, η
20 43	...	...	19.93	0.053	.....	...	...	Oeltz. Arg. (N.Z.) 12731
81 33	...	...	19.92	0.059	.....	...	118	Piazzi xii. 118
98 41	...	...	19.92	0.061	0.00	1683	119	21 Virginis, q
112 37 19.8	57.9	2	19.92	0.062	+ 0.07	1685	123	9 Corvi, β
47 52 53.2	56.7	3	19.92	0.059	- 0.30	1686	126	8 Canum Venat., β
81 29 26.9	57.4	1	19.91	0.061	.....	...	127	Piazzi xii. 127
19 26 22.9	58.3	2	19.91	0.054	+ 0.03	1689	129	5 Draconis, κ
66 35 57.0	58.4	2	19.91	0.062	.....	...	130	23 Comæ
70 51 5.7	59.3	4	19.91	0.063	.....	1687	132	24 Comæ (1st star)
70 51 6.8	60.3	3	19.91	0.063	.....	1688	133	24 Comæ (2nd star)
52 48 10.0	57.3	1	19.90	0.062	.....	...	...	W.B. (2) XII. 602
19 12 23.5	57.8	2	19.89	0.057	+ 0.01	1691	135	6 Draconis
95 3 34.7	57.3	2	19.89	0.067	+ 0.03	1690	136	25 Virginis, f
80 25 56.7	54.3	3	19.89	0.066	.....	1693	139	Bradley 1693
82 14 26.9	59.3	4	19.87	0.070	.....	...	...	Virginis (R)
97 13 29.0	59.0	11	19.86	0.071	+ 0.04	1694	146	26 Virginis, χ
97 15 37.1	60.3	4	19.85	0.071	.....	...	147	Piazzi xii. 147
20 41 49.6	58.3	2	19.84	0.062	.....	...	...	*
90 40 51.0	56.4	4	19.83	0.076	.....	1698	157	29 Virginis, γ (N. star)
90 40 55.6	56.4	4	19.83	0.076	.....	1699	158	29 Virginis, γ (S. star)
96 43 46.8	60.4	2	19.83	0.077	+ 0.04	1700	159	28 Virginis
20 53	...	...	19.82	0.066	.....	...	...	Oeltz. Arg. (N.Z.) 12906
20 34 33.2	57.4	1	19.82	0.066	.....	...	...	Oeltz. Arg. (N.Z.) 12910
5 35 15.9	57.6	3	+ 19.79	- 0.029	.....	...	...	Groombridge 1923

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.			Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h.	m.	s.	1800+		s.	s.	s.
1226	Var.	...	Ursæ Majoris (S)...	12	37	48.11	55.5	5	+ 2.662	- 0.0361	.....
1227	6.2	4	10 Canum Venat.	12	38	21.59	55.7	5	2.885	- 0.0178	- 0.033
1228	6.0	8.5	33 Virginis	12	39	15.67	58.1	10	3.031	- 0.0011	+ 0.018
1229	6.8	3	35 Virginis	12	40	43.69	61.4	5	3.054	+ 0.0020	- 0.001
1230	6.0	4	7 Draconis	12	41	50.13	57.9	5	2.484	- 0.0398	.....
1231	6.5	4	11 Canum Venat.	12	42	14.72	55.2	5	2.788	- 0.0234	.....
1232	7.5	7	Piazzii xii. 193	12	42	52.48	58.1	7	3.102	+ 0.0079	.....
1233	10.6	2	*	12	43	5	...	...	2.417	- 0.0396	.....
1234	Var.	...	Virginis (U).....	12	43	59.45	59.9	8	3.044	+ 0.0012	.....
1235	6.5	5	32 Comæ	12	45	14.46	58.6	4	2.988	- 0.0046	.....
1236	6.9	8	33 Comæ	12	45	24.80	57.9	5	2.987	- 0.0046	.....
1237	6.5	1	Lalande 23992	12	45	29	...	...	2.971	- 0.0040	.....
1238	6.3	4	38 Virginis	12	46	1.11	55.8	5	3.085	+ 0.0059	- 0.016
1239	5.2	2	40 Virginis, ψ	12	47	4.50	58.5	6	3.114	+ 0.0091	- 0.002
1240	2.0*	...	77 Ursæ Majoris, ϵ ...	12	47	51.63	57.6	4	2.650	- 0.0277	+ 0.013
1241	6.0	13	Groombridge 1937 ...	12	48	1.19	58.0	14	0.345	+ 0.2280	.....
1242	5.1	2	Groombridge 1940 ...	12	48	8.77	58.6	8	0.339	+ 0.2290	.....
1243	3.0*	...	43 Virginis, δ	12	48	33.05	59.6	13	3.052	+ 0.0025	- 0.030
1244	9.5	1	*	12	49	5	...	...	2.330	- 0.0345	.....
1245	6.7	6	12 Can. Ven. (1st star)	12	49	27.25	56.6	6	2.840	- 0.0154	.....
1246	3.0*	...	12 Can. Ven. (2nd star) α	12	49	28.47	56.5	7	2.840	- 0.0154	- 0.023
1247	5.5	1	8 Draconis	12	49	53.37	57.8	2	2.417	- 0.0330	[+ 0.014]
1248	8.2	4	Bradley 1726 (1st star)	12	50	8.71	55.3	4	2.660	- 0.0256	.....
1249	6.4	2	Bradley 1726 (2nd star)	12	50	9.00	57.3	1	2.660	- 0.0256	.....
1250	...	...	Groombridge 1946 ...	12	52	58	...	...	+ 2.254	- 0.0312	.....
1251	10.2	2	Redhill 1926.....	12	53	31	...	...	- 0.155	+ 0.3399	.....
1252	8.0	9	Groombridge 1947 ...	12	53	46.89	58.3	3	+ 2.239	- 0.0305	.....
1253	7.7	6	Piazzii xii. 246	12	54	21.78	57.6	4	3.060	+ 0.0036	.....
1254	5.8	6.5	9 Draconis	12	54	37.20	56.0	5	2.316	- 0.0301	- 0.018
1255	5.2	4	78 Ursæ Majoris	12	54	42.70	57.7	5	2.583	- 0.0255	+ 0.011
1256	2.7*	...	47 Virginis, ϵ	12	55	12.41	59.3	13	3.006	- 0.0008	- 0.018
1257	5.4	3	49 Virginis, g	13	0	33.93	57.8	9	3.134	+ 0.0104	+ 0.001
1258	6.4	6	Piazzii xii. 278	13	0	50.61	58.1	5	2.390	- 0.0259	.....
1259	6.6	7.5	Bradley 1745	13	1	11.32	55.1	5	+ 2.882	- 0.0084	.....
1260	7.9	12	Radcliffe 2967	13	1	31.15	55.7	8	- 2.963	+ 1.4456	.....

1247. The proper motion in R.A. is taken from the Radcliffe Catalogue.

1249. Identical with Groombridge 1941.

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazz.	Name of Star.
° ' "	1800+		"	"	"			
28 8 22.7	54.3	3	+ 19.78	- 0.073	.....	...	...	Ursæ Majoris (S)
49 57 34.4	57.6	3	19.77	0.079	- 0.16	1705	171	10 Canum Venat.
79 40 36.1	55.1	4	19.76	0.084	+ 0.47	1706	173	33 Virginis
85 39 45.2	61.3	2	19.74	0.087	+ 0.01	1708	184	35 Virginis
22 26 40.6	57.5	3	19.72	0.075	.....	1713	190	7 Draconis
40 46 10.3	56.4	2	19.71	0.083	+ 0.01	1712	191	11 Canum Venat.
96 52 9.0	56.6	5	19.71	0.093	.....	...	193	Piazzii xii. 193
20 53 1.6	58.3	2	19.70	0.074	.....	...	...	*
83 41 1.9	59.4	4	19.69	0.093	.....	...	...	Virginis (U)
72 9 49.3	59.7	5	19.66	0.094	.....	1716	204	32 Comæ
72 7 41.4	57.9	5	19.66	0.094	.....	1717	206	33 Comæ
73 6 52.7	59.4	1	19.66	0.093	.....	...	...	Lalande 23992
92 47 29.9	58.1	4	19.65	0.098	+ 0.03	1718	208	38 Virginis
98 46 41.6	59.8	4	19.63	0.101	+ 0.04	1721	214	40 Virginis, ψ
33 16 47.5	56.6	8	19.62	0.088	+ 0.05	1722	220	77 Ursæ Majoris, ϵ
5 49 15.9	54.4	6	19.62	0.018	.....	1730	230	Groombridge 1937
5 49 33.3	56.4	2	19.62	0.018	.....	1731	...	Groombridge 1940
85 50 27.1	56.3	2	19.61	0.102	+ 0.09	1723	223	43 Virginis, δ
20 58 6.4	58.4	2	19.60	0.080	.....	...	...	*
50 55 42.6	60.4	3	19.59	0.097	.....	1724	...	12 Can. Ven. (1st star)
50 55 28.8	60.4	3	19.59	0.097	- 0.06	1725	226	12 Can. Ven. (2nd star) α
23 48 5.4	57.3	1	19.58	0.085	+ 0.06	1727	228	8 Draconis
35 8	...	...	19.58	0.094	.....	1726	...	Bradley 1726 (1st star)
35 8 31.8	61.4	1	19.58	0.094	.....	1726	...	Bradley 1726 (2nd star)
20 32 12.9	57.4	1	19.52	0.083	.....	...	...	Groombridge 1946
5 28 27.9	56.4	2	19.51	0.003	.....	...	...	Redhill 1926
20 28 7.0	59.6	6	19.50	0.084	.....	...	...	Groombridge 1947
87 43 29.2	55.1	4	19.49	0.113	.....	...	246	Piazzii xii. 246
22 38 48.7	55.6	5	19.48	0.088	+ 0.02	1737	250	9 Draconis
32 52 41.8	57.7	3	19.49	0.098	.....	1736	248	78 Ursæ Majoris
78 17 15.4	57.1	9	19.48	0.113	- 0.03	1735	249	47 Virginis, ϵ
99 59 28.0	56.5	5	19.36	0.128	- 0.02	1742	272	49 Virginis, g
27 12 25.2	57.8	5	19.35	0.100	.....	...	278	Piazzii xii. 278
61 41 32.5	55.4	4	19.35	- 0.119	.....	1745	...	Bradley 1745
3 21 43.0	57.9	4	+ 19.34	+ 0.107	.....	...	...	Radcliffe 2967

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.			Mean Year and Frac- tion of Year.	Number of R.A. Obs.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h.	m.	s.	1800+		s.	s.	s.
1261	9.3	1	Virginis, θ^1	13	2	42.23	58.3	2	+ 3.102	+ 0.0077	.....
1262	4.7	1	51 Virginis, θ^2	13	2	42.24	58.0	13	3.102	+ 0.0077	- 0.004
1263	4.6	1	42 Comæ, α	13	3	10.57	56.5	6	2.952	- 0.0034	- 0.031
1264	10.0	2	Oeltz.Arg.(N.Z.)13381	13	4	8.42	58.2	1	2.120	- 0.0224	.....
1265	5.4	2	53 Virginis	13	4	36.90	57.9	2	3.175	+ 0.0138	+ 0.003
1266	7.1	4	18 Canum Venat. ...	13	5	6.94	55.8	5	2.740	- 0.0145	.....
1267	4.3	1	43 Comæ, β	13	5	20.20	59.1	3	2.867	- 0.0080	- 0.060
1268	7.0	4	54 Virginis (1st star)	13	5	58.05	59.1	4	3.196	+ 0.0155	.....
1269	7.9	4	54 Virginis (2nd star)	13	5	58.49	58.4	3	3.196	+ 0.0155	.....
1270	5.4	3	55 Virginis	13	6	41.85	58.6	3	3.206	+ 0.0162	.....
1271	7.1	6	Groombridge 1971 ...	13	8	12.32	58.3	2	2.099	- 0.0199	.....
1272	6.2	1	57 Virginis	13	8	25.01	58.0	3	3.209	+ 0.0163	.....
1273	7.0	1	Groombridge 1972 ...	13	8	41	...	...	2.094	- 0.0196	.....
1274	5.5	2	59 Virginis, e	13	9	49.55	57.2	5	3.000	+ 0.0008	- 0.023
1275	6.7	2	58 Virginis	13	10	7	...	...	3.142	+ 0.0108	- 0.007
1276	5.7	3	61 Virginis	13	11	5.08	58.3	9	3.201	+ 0.0154	- 0.075
1277	7.5	5	Groombridge 2006 ...	13	11	13.29	56.4	3	-11.556	+ 8.6888	.....
1278	5.0	1	20 Canum Venat. ...	13	11	15.59	55.4	5	+ 2.713	- 0.0133	- 0.013
1279	7.3	7.5	Bradley 1768	13	13	29.60	57.8	5	3.030	+ 0.0030	.....
1280	7.3	4	Oeltz.Arg.(N.Z.)13530	13	13	33.34	58.4	4	2.005	- 0.0156	.....
1281	7.0	12.5	Piazzi xiii. 67	13	15	15.01	56.9	11	3.112	+ 0.0086	.....
1282	6.2	6.5	66 Virginis	13	17	16.11	57.8	5	3.106	+ 0.0082	+ 0.010
1283	1.0*	..	67 Virginis, α	13	17	49.29	58.1	21	3.154	+ 0.0114	- 0.005
1284	2.0*	...	79 Ursæ Majoris, ζ^1 ..	13	18	16.81	57.9	4	2.417	- 0.0173	+ 0.017
1285	4.9	3	Ursæ Majoris, ζ^2 ..	13	18	17.76	58.4	3	+ 2.417	- 0.0173	+ 0.014
1286	8.3	11.5	Redhill 1995	13	18	28.69	56.1	10	- 1.715	+ 0.6429	.....
1287	5.0	2	80 Ursæ Majoris, g ...	13	19	36.52	57.9	2	+ 2.404	- 0.0170	+ 0.016
1288	7.6	3	Groombridge 2007 ...	13	20	26.79	58.1	3	- 2.750	+ 1.0002	.....
1289	7.6	4	Piazzi xiii. 89	13	21	5.89	56.7	6	+ 3.073	+ 0.0061	.....
1290	6.5	1	Piazzi xiii. 96	13	21	12.45	58.3	1	2.122	- 0.0153	.....
1291	5.5	3	70 Virginis	13	21	34.91	60.4	3	+ 2.951	- 0.0005	- 0.019
1292	7.4	7	Radcliffe 3023	13	21	43.21	55.8	8	- 1.894	+ 0.6733	.....
1293	6.8	2	Piazzi xiii. 93	13	21	55.87	59.4	2	3.224	+ 0.0160	.....
1294	6.5	2	Piazzi xiii. 95	13	22	3.95	58.3	1	3.077	+ 0.0064	.....
1295	Var.	...	Piazzi xiii. 94	13	22	4.21	57.7	4	- 3.267	+ 0.0192	.....

1295. This is the variable star Hydræ (R).

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
94 47 18.8	61.4	2	+ 19.31	- 0.131	.....	...	...	Virginis, θ^1
94 47 26.4	57.6	5	19.31	0.131	+ 0.04	1747	281	51 Virginis, θ^2
71 43 45.2	57.7	3	19.30	0.125	.....	1748	2	42 Comæ, α
21 7 25.0	57.3	1	19.29	0.093	.....	...	...	Oeltz. Arg. (N.Z.) 13381
105 26 32.9	56.7	3	19.27	0.137	+ 0.30	1752	9	53 Virginis
48 27 43.5	59.9	4	19.25	0.120	.....	1753	13	18 Canum Venat.
61 24 39.9	56.3	4	19.25	0.126	- 0.89	1755	15	43 Comæ, β
108 4 55.8	60.2	5	19.23	0.140	.....	1754	17	54 Virginis (1st star)
108 4 53.5	61.4	3	19.23	0.140	.....	...	...	54 Virginis (2nd star)
109 11 40.6	59.3	3	19.22	0.142	.....	1756	20	55 Virginis
21 56 53.3	59.1	4	19.17	0.098	.....	...	...	Groombridge 1971
109 11 49.6	56.9	2	19.17	0.146	.....	1758	29	57 Virginis
21 58 11.5	61.4	1	19.16	0.098	.....	...	...	Groombridge 1972
79 50 36.1	57.4	4	19.13	0.140	- 0.19	1760	37	59 Virginis, e
94 48 26.1	60.7	3	19.13	0.146	- 0.01	1761	38	58 Virginis
107 31 56.0	57.2	7	19.10	- 0.151	+ 1.04	1763	44	61 Virginis
1 36 2.3	57.5	5	19.10	+ 0.507	.....	...	...	Groombridge 2006
48 41 20.6	56.0	3	19.09	- 0.129	- 0.03	1765	48	20 Canum Venat.
84 26 13.0	56.0	5	19.04	0.147	.....	1768	...	Bradley 1768
21 34	...	...	19.03	0.100	.....	...	...	Oeltz. Arg. (N.Z.) 13530
95 27 45.7	57.8	4	18.98	0.155	.....	...	67	Piazzi xiii. 67
94 25 53.2	57.6	4	18.93	0.158	+ 0.03	1773	73	66 Virginis
100 25 46.8	56.9	18	18.91	0.161	+ 0.04	1774	75	67 Virginis, α
34 20 34.1	58.2	6	18.90	0.126	+ 0.04	1776	78	79 Ursæ Majoris, ζ^1
34 20 45.1	59.9	5	18.90	- 0.126	+ 0.05	1777	79	Ursæ Majoris, ζ^2
5 21 30.8	57.7	4	18.89	+ 0.076	.....	...	...	Redhill 1995
34 16 54.2	59.5	5	18.86	- 0.128	+ 0.03	1779	85	80 Ursæ Majoris, g
4 30 50.2	55.3	1	18.83	+ 0.130	.....	...	...	Groombridge 2007
90 5 50.8	57.8	2	18.81	- 0.163	.....	...	89	Piazzi xiii. 89
26 1 10.4	62.0	2	18.81	0.115	.....	...	96	Piazzi xiii. 96
75 28 20.5	57.9	2	18.80	- 0.158	+ 0.57	1780	90	70 Virginis
5 22 6.6	57.0	1	18.79	+ 0.088	.....	...	...	Radcliffe 3023
108 0 10.4	58.3	2	18.78	- 0.173	.....	...	93	Piazzi xiii. 93
90 38 11.3	58.4	1	18.78	0.165		...	95	Piazzi xiii. 95
112 33 24.2	59.9	2	+ 18.78	- 0.175		...	94	Piazzi xiii. 94

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				h.	m.	s.	1800+		s.	s.	s.
1296	6.3	3	72 Virginis, ι^1	13	23	7.59	59.0	3	+ 3.120	+ 0.0091	+ 0.003
1297	7.0	0.5	Piazzi xiii. 102	13	23	15.16	61.4	1	2.901	— 0.0027	
1298	8.2	4	W.B. (1) XIII. 375 ...	13	23	34.58	59.9	2	3.132	+ 0.0099	.....
1299	7.3	3.5	Piazzi xiii. 114	13	24	35.20	57.4	2	3.086	+ 0.0071	.....
1300	5.0	1	74 Virginis, ι^2	13	24	41.49	57.4	1	3.119	+ 0.0090	— 0.006
1301	6.3	4	75 Virginis	13	25	23.03	58.1	3	3.199	+ 0.0141	.....
1302	6.0	3.5	76 Virginis, h	13	25	35.93	59.1	4	3.153	+ 0.0112	— 0.004
1303	Var.	...	Virginis (S)	13	25	41.40	55.4	3	3.127	+ 0.0096	.....
1304	5.7	1	Piazzi xiii. 133	13	25	47.99	58.4	1	0.467	+ 0.1105	.....
1305	7.4	2	W.B. (1) XIII. 438 ...	13	26	57.83	58.3	1	3.141	+ 0.0104	.....
1306	3.7*	...	79 Virginis, ζ	13	27	33.58	58.9	11	+ 3.071	+ 0.0063	— 0.019
1307	8.0	1	*	13	28	41	...	...	— 0.048	+ 0.1841	.....
1308	5.0	2	24 Canum Venat.	13	28	43.70	56.6	5	+ 2.476	— 0.0133	— 0.015
1309	7.3	2	Piazzi xiii. 135 (1st st.)	13	29	2.74	59.4	2	3.316	+ 0.0218	.....
1310	6.0	1	Piazzi xiii. 135 (2nd st.)	13	29	3.08	57.4	1	3.316	+ 0.0218	.....
1311	7.8	3	81 Virginis (1st star) .	13	30	15.32	56.7	5	3.136	+ 0.0101	— 0.001
1312	7.3*	...	81 Virginis (centre) ...	13	30	15	...	...	3.136	+ 0.0101	.....
1313	8.4	3	81 Virginis (2nd star)	13	30	15.38	54.4	3	3.136	+ 0.0101	.....
1314	6.9	6	Bradley 1795	13	31	42.49	58.1	4	2.373	— 0.0133	.....
1315	8.2	2	W.B. (1) XIII. 556 ...	13	32	32	...	...	3.151	+ 0.0109	.....
1316	5.8	7	82 Ursæ Majoris	13	34	5.18	58.2	6	2.348	— 0.0128	.....
1317	6.0	1	82 Virginis, m	13	34	15.98	61.4	5	+ 3.147	+ 0.0107	— 0.010
1318	8.0	12	Radcliffe 3075	13	35	20.42	56.3	13	— 4.635	+ 1.5750	.....
1319	8.3	3	Groombridge 2065 ...	13	35	31.45	56.0	2	— 14.833	+ 9.6464	.....
1320	6.1	5.5	84 Virginis, o	13	36	1.53	56.8	8	+ 3.032	+ 0.0048	— 0.023
1321	6.3	8	Piazzi xiii. 184	13	37	8.48	57.9	4	1.863	— 0.0055	.....
1322	6.7	4	85 Virginis	13	38	3.13	57.4	5	3.221	+ 0.0148	— 0.004
1323	6.8	4.5	Rumker 4459	13	40	1.28	58.6	4	3.003	+ 0.0036	.....
1324	5.0	1	4 Boötis, τ	13	40	36.60	58.4	11	2.886	— 0.0008	— 0.034
1325	6.0	5	84 Ursæ Majoris	13	41	21.82	59.6	4	2.251	— 0.0108	.....
1326	9.5	1	*	13	42	0	...	...	0.276	+ 0.1155	.....
1327	2.0*	...	85 Ursæ Majoris, η ...	13	42	1.27	57.9	13	+ 2.386	— 0.0105	— 0.012
1328	8.8	3	Oeltz. Arg. (N.Z.) 14009	13	42	8.60	57.4	1	— 0.061	+ 0.1604	.....
1329	5.4	2	89 Virginis	13	42	16.12	59.2	4	+ 3.253	+ 0.0163	— 0.009
1330	7.3	1	Piazzi xiii. 206	13	42	33.31	59.4	2	+ 3.285	+ 0.0181	

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° ' "	1800 +		"	"	"			
95 44 46.0	59.3	1	+ 18.75	— 0.170	— 0.03	1782	101	72 Virginis, l^1
70 13	...	...	18.74	0.160		...	102	Piazz. xiii. 102
97 8 22.1	59.0	3	18.74	0.171	.....	...	...	W.B. (1) XIII. 375
91 36 19.7	59.1	3	18.71	0.170	.....	...	114	Piazz. xiii. 114
95 31 55.1	61.4	1	18.70	0.172	+ 0.04	1784	115	74 Virginis, l^2
104 38 30.4	58.4	4	18.68	0.178	.....	1785	117	75 Virginis
99 26 33.3	58.6	4	18.67	0.176	+ 0.03	1786	118	76 Virginis, h
96 28 24.0	54.4	3	18.67	0.175	.....	...	...	Virginis (S)
10 37 58.0	58.4	2	18.67	0.033	.....	...	133	Piazz. xiii. 133
97 53 52.1	59.4	1	18.63	0.178	.....	...	...	W.B. (1) XIII. 438
89 52 45.1	56.7	5	18.61	0.175	— 0.06	1789	128	79 Virginis, ζ
9 11 5.2	58.4	1	18.57	0.005	.....	...	...	*
40 16 2.5	58.0	3	18.57	0.144	0.00	1791	138	24 Canum Venat.
115 46 57.1	60.0	3	18.56	0.192	.....	...	...	Piazz. xiii. 135 (1st st.)
115 46 45.5	60.0	3	18.56	0.192	.....	...	135	Piazz. xiii. 135 (2nd st.)
97 9 22.5	58.2	4	18.52	0.184	.....	...	...	81 Virginis (1st star)
97 9 24.2	54.3	1	18.52	0.184	.....	1793	142	81 Virginis (centre)
97 9 21.8	54.4	1	18.52	0.184	.....	...	...	81 Virginis (2nd star)
36 41 32.0	57.9	4	18.47	0.142	.....	1795	...	Bradley 1795
98 34 23.7	61.4	2	18.44	0.188	.....	...	...	W.B. (1) XIII. 556
36 22 11.7	58.7	5	18.39	0.144	.....	1799	165	82 Ursæ Majoris
98 0	...	...	18.38	— 0.191	0.00	1796	162	82 Virginis, m
4 0 38.8	56.1	4	18.34	+ 0.265	.....	...	...	Radcliffe 3075
1 43 53.5	56.9	2	18.34	+ 0.868	.....	...	...	Groombridge 2065
85 45 7.3	56.0	5	18.32	— 0.188	+ 0.06	1800	169	84 Virginis, o
24 28 11.5	57.8	5	18.28	0.119	.....	...	184	Piazz. xiii. 184
105 3 45.7	55.6	5	18.25	0.203	+ 0.04	1804	181	85 Virginis
82 56 38.7	58.4	4	18.21	0.191	.....	...	194	Rumker 4459
71 50 37.7	55.6	4	18.15	0.187	— 0.05	1810	199	4 Boötis, τ
34 51 59.6	58.1	3	18.13	0.148	.....	1812	205	84 Ursæ Majoris
11 38 6.6	61.4	2	18.10	0.025	.....	...	...	*
39 59 13.4	59.4	7	18.10	0.158	+ 0.03	1815	209	85 Ursæ Majoris, η
10 25 30.5	59.9	2	18.09	0.004	.....	...	...	Oeltz. Arg. (N.Z.) 14009
107 26 6.9	57.6	4	18.09	0.213	+ 0.03	1811	204	89 Virginis
110 10 19.2	58.4	3	+ 18.08	— 0.215		...	206	Piazz. xiii. 206

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				h.	m.	s.	1800+		s.	s.	s.
1331	5.3	1	6 Boötis, ϵ	13	43	5.63	57.4	1	+ 2.838	— 0.0022	
1332	6.8	2	B. F. 1904.....	13	44	53.63	57.3	2	2.652	— 0.0066	
1333	6.0	1	B. F. 1905.....	13	44	58.52	58.3	1	2.653	— 0.0067	.....
1334	8.7	1	*	13	45	38.47	61.4	1	1.693	+ 0.0015	.....
1335	7.3	4	Piazzi xiii. 228.....	13	45	48.90	58.4	3	+ 2.885	— 0.0002	.....
1336	6.0	2	Piazzi xiii. 263.....	13	46	31.08	60.1	3	— 2.150	+ 0.5672	.....
1337	8.1	4	*	13	46	32.08	59.9	2	+ 1.682	+ 0.0019	.....
1338	9.5	1	*	13	46	41	...	...	0.285	+ 0.1267	.....
1339	3.0*	...	8 Boötis, η	13	48	1.15	58.2	17	2.862	— 0.0007	— 0.004
1340	5.9	3	86 Ursæ Majoris	13	48	41.64	58.3	2	2.218	— 0.0090	.....
1341	6.5	8	Lalande 25653.....	13	49	57.76	58.0	5	2.675	— 0.0052	.....
1342	7.1	3	Piazzi xiii. 256.....	13	50	56.62	59.1	3	3.197	+ 0.0130	.....
1343	6.0	2	48 Hydræ	13	52	10.27	57.9	2	3.356	+ 0.0213	.....
1344	8.5	2	Oeltz. Arg. (N.Z.) 14167	13	54	23.43	59.4	2	0.848	+ 0.0491	.....
1345	4.6	3	93 Virginis, τ	13	54	31.35	60.3	16	3.047	+ 0.0064	+ 0.001
1346	9.2	4	*	13	54	39.65	57.4	1	0.609	+ 0.0692	.....
1347	9.4	5.5	*	13	55	27.52	57.4	1	0.597	+ 0.0698	.....
1348	6.5	3	W.B. (1) XIII. 982 ...	13	56	39.56	61.4	2	2.978	+ 0.0040	.....
1349	7.3	5	B. F. 1925.....	13	57	36.67	58.7	3	3.256	+ 0.0155	.....
1350	8.2	5	Piazzi xiii. 291.....	13	57	47.17	58.4	1	3.169	+ 0.0115	.....
1351	7.7	1	Oeltz. Arg. (N.Z.) 14219	13	58	14	...	...	1.083	+ 0.0315	.....
1352	3.7*	...	49 Hydræ, π	13	58	24.44	58.4	5	3.394	+ 0.0227	.....
1353	...	...	Piazzi xiii. 306.....	13	58	45.74	57.4	1	1.315	+ 0.0183	.....
1354	7.0	1	94 Virginis	13	58	53.10	60.4	2	3.167	+ 0.0115	— 0.002
1355	6.5	0.5	95 Virginis	13	59	18.88	56.0	3	3.173	+ 0.0117	— 0.010
1356	...	...	Oeltz. Arg. (N.Z.) 14246	13	59	18.99	58.4	1	1.162	+ 0.0265	.....
1357	7.0	3	Piazzi xiii. 300.....	13	59	36.69	59.4	2	+ 3.258	+ 0.0155	.....
1358	8.5	8	Radcliffe 3141	14	0	17.12	55.3	7	— 6.238	+ 1.8285	.....
1359	8.9	2	W.B. (1) XIII. 1058...	14	0	24.09	59.9	2	+ 3.196	+ 0.0126	.....
1360	8.7	1	Oeltz. Arg. (N.Z.) 14288	14	1	30	...	...	1.479	+ 0.0106	.....
1361	...	...	96 Virginis	14	1	33.36	58.7	3	3.187	+ 0.0122	.....
1362	5.5	1	Piazzi xiii. 317.....	14	3	12.06	58.7	3	+ 3.264	+ 0.0156	.....
1363	7.1	7	Groombridge 2099 ...	14	4	27.61	57.4	9	— 7.993	+ 2.5543	.....
1364	7.7	2	Piazzi xiv. 10	14	4	32.43	57.7	3	+ 3.138	+ 0.0102	
1365	7.3	1	97 Virginis	14	5	6.01	58.4	1	+ 3.185	+ 0.0121	

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° ' "	1800+		"	"	"			
68 2 21.9	55.4	3	+ 18.06	- 0.187		1816	215	6 Boötis, ϵ
54 32	...	...	17.99	0.179		...	...	B. F. 1904
54 38 19.9	57.4	1	17.99	0.179		...	...	B. F. 1905
23 20	...	...	17.96	0.118	.....	...	...	*
72 34 37.9	55.4	3	17.96	- 0.195	.....	...	228	Piazzi xiii. 228
6 32 44.1	59.0	3	17.93	+ 0.133	.....	...	263	Piazzi xiii. 263
23 19 34.6	58.7	3	17.93	- 0.118	.....	...	...	*
12 9 2.9	57.4	2	17.92	0.027	.....	...	...	*
70 53 56.5	60.3	6	17.87	0.197	+ 0.36	1821	240	8 Boötis, η
35 34 55.5	60.4	3	17.84	0.155	+ 0.05	1824	250	86 Ursæ Majoris
57 16 56.8	57.7	3	17.78	0.188	.....	...	...	Lalande 25653
101 22 11.0	54.4	3	17.75	0.225	.....	...	256	Piazzi xiii. 256
114 19 31.3	57.2	5	17.70	0.238	.....	1827	262	48 Hydræ
16 3 4.8	57.4	1	17.61	0.067	.....	...	...	Oeltz. Arg. (N.Z.) 14167
87 46 35.7	58.5	8	17.60	0.221	+ 0.07	1829	275	93 Virginis, τ
14 35 54.4	61.4	3	17.59	0.051	.....	...	...	*
14 36 51.7	59.0	5	17.56	0.050	.....	...	...	*
81 46 40.6	61.4	1	17.51	0.220	.....	...	...	W.B. (1) XIII. 982
105 39 48.7	58.7	3	17.48	0.241	.....	...	...	B. F. 1925
98 22 32.7	58.4	3	17.47	0.235	.....	...	291	Piazzi xiii. 291
18 20 49.1	57.4	1	17.44	0.079	.....	...	...	Oeltz. Arg. (N.Z.) 14219
116 0 20.5	54.4	3	17.44	0.252	+ 0.14	1832	295	49 Hydræ, π
20 38 49.6	59.9	2	17.42	0.103	.....	...	306	Piazzi xiii. 306
98 13	...	...	17.42	0.237	+ 0.01	1833	297	94 Virginis
98 38 37.6	59.1	4	17.40	0.238	- 0.01	1834	299	95 Virginis
18 59	...	...	17.40	0.091	.....	...	...	Oeltz. Arg. (N.Z.) 14246
105 31 16.2	57.9	4	17.39	- 0.246	.....	...	300	Piazzi xiii. 300
4 6 58.3	57.4	2	17.35	+ 0.449	.....	...	...	Radcliffe 3141
100 29	...	...	17.35	- 0.241	.....	...	...	W.B. (1) XIII. 1058
22 59 31.1	61.4	1	17.30	0.116	.....	...	...	Oeltz. Arg. (N.Z.) 14288
99 40 10.2	57.4	1	17.30	0.243	.....	1835	311	96 Virginis
105 38 21.2	59.9	2	17.23	- 0.251	.....	...	317	Piazzi xiii. 317
3 34 20.6	56.4	1	17.17	+ 0.595	.....	...	...	Groombridge 2099
95 28 0.2	61.4	1	17.17	- 0.245		...	10	Piazzi xiv. 10
99 14 21.7	59.4	1	+ 17.14	- 0.249		1841	11	97 Virginis

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				h.	m.	s.	1800+		s.	s.	s.
1366	6.7	3	Bradley 1840	14	5	13.47	57.9	2	+ 3.410	+ 0.0226	
1367	7.3	1	W.B. (1) XIV. 66 ...	14	5	16.61	57.4	1	3.100	+ 0.0087	
1368	4.3*	...	98 Virginis, κ	14	5	25.88	58.3	11	3.190	+ 0.0123	+ 0.001
1369	7.5	1	Piazzi xiv. 15	14	5	31.16	60.3	2	3.104	+ 0.0089	.....
1370	7.3	1	Lacaille 5869	14	6	55.38	56.4	2	3.456	+ 0.0249	.....
1371	6.5	4	Bradley 1843	14	7	4.03	57.7	3	3.137	+ 0.0102	.....
1372	6.0	1	14 Boötis	14	7	21.37	59.4	2	2.901	+ 0.0023	.....
1373	7.3	2	B. F. 1948.....	14	7	41.01	61.4	1	2.668	— 0.0028	.....
1374	...	...	Piazzi xiv. 22	14	7	41.61	58.9	2	3.296	+ 0.0168	.....
1375	5.8	2	15 Boötis	14	7	59.62	59.5	2	2.937	+ 0.0033	.....
1376	7.0	1	Boötis, κ^1	14	8	26.69	58.4	1	2.148	— 0.0049	.....
1377	4.7	1	17 Boötis, κ^2	14	8	27.94	58.4	1	2.148	— 0.0049	+ 0.009
1378	7.5	1	Lalande 26118	14	8	30.77	59.4	1	2.805	0.0000	.....
1379	...	...	99 Virginis, ι	14	8	40.53	57.4	1	3.138	+ 0.0102	+ 0.001
1380	1.0*	...	16 Boötis, α	14	9	16.55	58.6	11	+ 2.813	+ 0.0003	— 0.079
1381	...	...	4 Ursæ Minoris.....	14	9	27.03	58.4	1	— 0.355	+ 0.1579	.....
1382	5.5	1	Groombridge 2091 ...	14	9	28.47	58.4	1	+ 1.095	+ 0.0286	.....
1383	6.6	5	Bradley 1848	14	9	29.32	56.4	4	2.817	+ 0.0003	.....
1384	...	...	19 Boötis, λ	14	11	3.57	59.4	3	2.304	— 0.0053	— 0.018
1385	6.1	2	Lacaille 5892	14	11	4.81	57.4	1	3.412	+ 0.0220	.....
1386	4.4	4.5	21 Boötis, ι	14	11	12.26	57.4	1	2.145	— 0.0046	— 0.018
1387	4.7*	...	100 Virginis, λ	14	11	32.34	58.6	4	3.236	+ 0.0140	— 0.002
1388	5.8	4	18 Boötis	14	12	29.70	58.4	3	2.894	+ 0.0024	+ 0.008
1389	5.3	4	20 Boötis	14	13	7.67	57.9	4	2.848	+ 0.0014	.....
1390	5.6	2	51 Hydræ	14	15	2.15	58.9	2	3.452	+ 0.0236	.....
1391	...	...	Piazzi xiv. 62 (N. star)	14	15	15	...	...	3.165	+ 0.0112	.....
1392	...	...	Piazzi xiv. 62 (S. star)	14	15	15	...	...	3.165	+ 0.0112	.....
1393	...	...	2 Libræ.....	14	15	53.86	58.4	2	3.218	+ 0.0132	— 0.004
1394	7.2	5	Piazzi xiv. 71	14	17	2.46	58.4	5	2.987	+ 0.0053	.....
1395	6.3	3	Piazzi xiv. 73	14	17	13.47	60.4	5	2.987	+ 0.0053	.....
1396	...	...	Lacaille 5937	14	17	43.54	57.4	1	3.444	+ 0.0228	.....
1397	8.3	4	Piazzi xiv. 78	14	18	33.88	57.4	2	3.446	+ 0.0228	.....
1398	5.3	2	22 Boötis, f	14	19	56.60	61.4	4	2.795	+ 0.0009	.....
1399	3.7*	...	23 Boötis, θ	14	20	25.74	57.4	6	2.070	— 0.0026	— 0.029
1400	6.0	6	24 Boötis, g	14	23	45.52	55.2	5	+ 2.121	— 0.0027	— 0.032

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
115 57 10.5	54.4	3	+ 17.13	- 0.266	+ 0.11	1840	...	Bradley 1840
92 18	...	...	17.13	0.242	.....	...	13	W.B. (1) XIV. 66
99 37 13.3	55.3	2	17.13	0.250	- 0.02	1842	14	98 Virginis, κ
92 38 51.8	58.4	1	17.13	0.244	.....	...	15	Piazzi xiv. 15
118 37 34.9	59.2	4	17.06	0.272	.....	...	...	Lacaille 5869
95 17 41.9	59.4	2	17.05	0.248	.....	1843	19	Bradley 1843
76 22 56.4	57.4	1	17.04	0.230	.....	1844	23	14 Boötis
60 14 18.1	60.0	2	17.02	0.262	.....	...	...	B. F. 1948
107 32 45.8	61.4	2	17.02	0.213	.....	...	22	Piazzi xiv. 22
79 14 16.6	57.4	1	17.01	0.234	.....	1845	25	15 Boötis
37 33 22.3	57.9	2	16.99	0.174	.....	...	30	Boötis, κ^1
37 33 15.3	58.4	1	16.99	0.174	+ 0.02	1849	31	17 Boötis, κ^2
69 26	...	...	16.98	0.225	.....	...	...	Lalande 26118
95 19 49.5	60.1	3	16.98	0.251	+ 0.41	1846	28	99 Virginis, ι
70 5 12.8	58.8	5	16.95	- 0.227	+ 1.93	1847	32	16 Boötis, α
11 47	...	...	16.94	+ 0.021	- 0.15	1859	49	4 Ursæ Minoris
19 54 35.9	61.4	1	16.94	- 0.093	.....	...	...	Groombridge 2091
70 26 2.9	55.2	5	16.94	0.227	.....	1848	...	Bradley 1848
43 16 3.2	59.4	1	16.86	0.189	- 0.15	1852	41	19 Boötis, λ
115 10 52.5	61.4	2	16.86	0.276	.....	...	...	Lacaille 5892
37 59 7.2	56.4	1	16.85	0.176	- 0.08	1854	42	21 Boötis, ι
102 43 27.5	56.3	1	16.84	0.264	- 0.02	1850	37	100 Virginis, λ
76 20 53.7	57.9	2	16.80	0.238	- 0.01	1853	46	18 Boötis
73 2 58.8	60.1	3	16.77	0.235	.....	1855	51	20 Boötis
117 6 32.5	56.4	3	16.67	0.287	.....	1857	58	51 Hydræ
97 7 19.7	61.5	1	16.66	0.264	.....	...	...	Piazzi xiv. 62 (N. star)
97 7 23.9	61.5	1	16.66	0.264	.....	...	62	Piazzi xiv. 62 (S. star)
101 4 21.4	58.1	3	16.63	0.270	+ 0.09	1860	64	2 Libræ
83 32 24.3	55.4	4	16.58	0.252	.....	...	71	Piazzi xiv. 71
83 32	...	...	16.57	0.252	.....	...	73	Piazzi xiv. 73
116 12 53.4	57.4	2	16.54	0.291	.....	...	...	Lacaille 5937
116 13 25.5	60.0	5	16.50	0.292	.....	...	78	Piazzi xiv. 78
70 8 28.9	61.4	2	16.43	0.241	- 0.04	1864	86	22 Boötis, f
37 30 2.6	57.4	8	16.40	0.181	+ 0.41	1867	92	23 Boötis, θ
39 31 37.0	56.7	6	+ 16.24	- 0.189	+ 0.07	1868	105	24 Boötis, g

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				h. m. s.	1800+		s.	s.	s.
1401	8.3	1	Redhill 2165.....	14 24 57.42	58.4	1	- 5.263	+ 1.1357	
1402	4.0	2	25 Boötis, ρ	14 25 47.64	59.7	10	+ 2.595	- 0.0016	- 0.008
1403	6.0	1	B. F. 1988.....	14 26 8.26	61.4	3	2.661	- 0.0008	.....
1404	2.7*	...	27 Boötis, γ	14 26 26.38	55.6	5	2.428	- 0.0029	- 0.004
1405	4.7*	...	28 Boötis, σ	14 28 35.07	57.4	7	2.599	- 0.0013	+ 0.016
1406	7.5	6	Piazzi xiv. 131	14 28 54.91	58.1	3	1.978	- 0.0007	.....
1407	6.7	3	Piazzi xiv. 127	14 29 33.22	59.1	3	+ 3.240	+ 0.0135	.....
1408	9.1	5	Radcliffe 3250	14 30 47.66	56.5	6	-20.950	+10.1848	.....
1409	Var.	...	Boötis (R)	14 31 1.07	61.4	1	+ 2.649	- 0.0005	.....
1410	5.7	1	33 Boötis	14 33 37.72	57.4	1	2.241	- 0.0021	- 0.009
1411	5.9	3	Piazzi xiv. 156.....	14 33 48.58	58.8	3	1.901	+ 0.0009	.....
1412	5.6	4	29 Boötis, π^1	14 34 8.82	57.9	4	2.817	+ 0.0023	} + 0.001
1413	6.4	2	29 Boötis, π^2	14 34 9.26	58.4	3	2.817	+ 0.0023	
1414	7.1	8	Piazzi xiv. 146.....	14 34 26.75	60.0	5	3.244	+ 0.0135	.....
1415	...	...	107 Virginis, μ	14 35 41.18	58.9	4	3.146	+ 0.0104	+ 0.007
1416	5.8	2	54 Hydræ (1st star)...	14 37 54.37	57.4	2	3.465	+ 0.0214	- 0.016
1417	7.5	3	54 Hydræ (2nd star)...	14 37 55.00	57.9	2	3.465	+ 0.0214	.....
1418	6.2	2	5 Libræ.....	14 38 14.90	59.4	4	3.298	+ 0.0152	- 0.003
1419	6.5	2	108 Virginis	14 38 22.51	54.4	2	3.053	+ 0.0077	.....
1420	2.3*	...	36 Boötis, ϵ	11 38 52.33	57.9	11	2.624	- 0.0001	- 0.005
1421	6.8	3	Piazzi xiv. 179	14 39 20.65	57.4	2	+ 2.192	- 0.0014	.....
1422	9.5	1	Redhill 2207.....	14 39 41.06	58.4	1	- 5.217	+ 0.9838	.....
1423	9.2	2	Redhill 2206.....	14 39 42.37	58.4	1	- 5.186	+ 0.9756	.....
1424	5.0	0.5	58 Hydræ	14 42 4.56	57.9	2	+ 3.521	+ 0.0233	.....
1425	6.0	2	8 Libræ.....	14 42 56.89	57.4	1	3.313	+ 0.0154	- 0.007
1426	2.3*	...	9 Libræ, α	14 43 8.32	57.8	14	3.314	+ 0.0155	- 0.007
1427	6.7	1	Bradley 1895	14 43 45.51	58.4	2	3.343	+ 0.0164	- 0.007
1428	6.0	1	11 Libræ	14 43 45.53	58.4	2	3.098	+ 0.0090	.....
1429	6.9	0.5	Boötis, ξ^1	14 44 55.56	58.4	1	2.756	+ 0.0021	.....
1430	4.8	0.5	37 Boötis, ξ^2	14 44 55.92	59.4	4	2.756	+ 0.0021	+ 0.010
1431	7.5	1	6 Ursæ Minoris.....	14 45 8.67	58.4	1	0.266	+ 0.0686	.....
1432	7.5	3	*	14 45 16.49	58.4	1	3.257	+ 0.0135	.....
1433	6.0*	...	Lacaille 6140	14 46 3.54	56.4	1	3.538	+ 0.0235	.....
1434	5.7	2	Piazzi xiv. 217	14 47 53.33	56.2	4	1.532	+ 0.0091	
1435	7.0	0.5	Lacaille 6161	14 48 44.96	57.4	1	+ 3.504	+ 0.0218	

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° ' "	1800+		"	"	"			
5 24 58.5	59.4	2	+ 16.17	+ 0.446		...	...	Redhill 2165
59 0 43.7	57.8	7	16.13	— 0.232	— 0.14	1869	112	25 Boötis, ρ
62 42 4.0	61.5	2	16.12	0.238	.....	...	...	B. F. 1988
51 4 40.4	57.2	4	16.10	0.219	— 0.16	1871	117	27 Boötis, γ
59 38 39.0	54.4	3	15.99	0.236	.....	1872	124	28 Boötis, σ
36 29 6.1	56.9	4	15.97	0.182	.....	...	131	Piazzi xiv. 131
101 42 31.2	59.4	4	15.93	— 0.294	.....	...	127	Piazzi xiv. 127
1 56 58.5	58.4	3	15.87	+ 1.862	.....	...	...	Radcliffe 3250
62 39 14.3	61.4	2	15.86	— 0.244	.....	...	...	Boötis (R)
44 59 21.8	58.4	1	15.72	0.211	+ 0.04	1878	149	33 Boötis
35 22 13.5	57.6	4	15.70	0.180	.....	...	156	Piazzi xiv. 156
72 58 44.9	60.4	3	15.68	0.263	} + 0.01	1875	147	29 Boötis, π^1
72 58 45.5	60.1	3	15.68	0.263				29 Boötis, π^2
101 38 3.2	59.1	4	15.67	0.302	.....	...	146	Piazzi xiv. 146
95 2 50.7	57.4	3	15.60	0.295	+ 0.33	1880	158	107 Virginis, μ
114 50 45.6	59.4	3	15.48	0.328	+ 0.08	1881	163	54 Hydræ (1st star)
114 50 52.0	58.6	5	15.48	0.328	.....	...	...	54 Hydræ (2nd star)
104 52 0.9	59.5	2	15.46	0.313	+ 0.01	1882	167	5 Libræ
88 41 22.2	59.7	3	15.45	0.291	.....	1884	168	108 Virginis
62 20 1.7	59.7	2	15.43	— 0.251	— 0.01	1890	175	36 Boötis, ϵ
44 13 14.9	57.9	2	15.40	— 0.211	.....	...	179	Piazzi xiv. 179
5 54	...	...	15.37	+ 0.481	.....	...	...	Redhill 2207
5 55 55.2	58.9	2	15.37	+ 0.478	.....	...	...	Redhill 2206
117 22 28.3	61.4	1	15.25	— 0.340	.....	1892	184	58 Hydræ
105 24 47.1	58.4	1	15.20	0.322	+ 0.07	1893	186	8 Libræ
105 27 27.8	56.7	3	15.19	0.323	+ 0.06	1894	187	9 Libræ, α
107 12 19.9	58.8	3	15.15	0.326	.....	1895	188	Bradley 1895
91 42 47.7	57.9	2	15.15	0.303	.....	1897	191	11 Libræ
70 18 54.4	60.0	5	15.08	0.272	.....	...	...	Boötis, ξ^1
70 18 56.6	60.1	4	15.08	0.272	+ 0.12	1898	197	37 Boötis, ξ^2
17 27 1.2	58.4	3	15.07	0.032	+ 0.01	1906	210	6 Ursæ Minoris
101 48 23.3	60.4	3	15.06	0.320	.....	...	...	*
117 46 26.4	60.1	3	15.02	0.349	.....	...	...	Lacaille 6140
30 8 9.1	56.5	4	14.91	0.156	.....	...	217	Piazzi xiv. 217
115 42 58.2	59.9	2	+ 14.86	— 0.350	.....	...	...	Lacaille 6161

No.	Mag.	Number of Estimations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
1436	5.4	2	15 Libræ, ξ^2	14 49 10.49	60.1	6	+ 3.244	+ 0.0130	- 0.001
1437	8.5	3	Piazzi xiv. 212 (1st st.)	14 49 16.87	57.7	3	3.414	+ 0.0185	.....
1438	5.9	2	Piazzi xiv. 212 (2nd st.)	14 49 17.79	57.7	3	3.414	+ 0.0185	.....
1439	4.7*	...	16 Libræ	14 49 52.56	58.4	3	3.131	+ 0.0099	.....
1440	7.0	2	17 Libræ	14 50 38.31	61.4	3	+ 3.241	+ 0.0128	.....
1441	2.0*	...	7 Ursæ Minoris, β ...	14 51 8.89	58.4	1	- 0.254	+ 0.1035	- 0.005
1442	5.9	2	18 Libræ	14 51 19.53	57.4	1	+ 3.241	+ 0.0128	.....
1443	6.5	1	Piazzi xiv. 235	14 51 44.37	57.4	1	1.979	+ 0.0013	.....
1444	7.6	3	W.B. (1) XIV. 1027...	14 55 17.50	58.1	3	3.233	+ 0.0124	.....
1445	3.5*	...	20 Libræ	14 55 52.98	58.7	4	3.500	+ 0.0209	- 0.007
1446	3.0*	...	42 Boötis, β	14 56 40.29	56.6	6	+ 2.264	- 0.0001	- 0.003
1447	7.2	8	Groombridge 2210 ...	14 57 28.39	57.4	9	- 12.324	+ 2.9697	.....
1448	6.8	5	Bradley 1921	14 57 47.79	60.0	5	+ 2.582	+ 0.0010	.....
1449	5.0	1	43 Boötis, ψ	14 58 26.80	59.5	7	2.583	+ 0.0011	- 0.013
1450	5.4	1.5	21 Libræ, ν^1	14 58 49.29	56.8	3	3.337	+ 0.0153	- 0.002
1451	...	...	22 Libræ, ν^2	14 59 0	...	...	3.341	+ 0.0154	- 0.003
1452	6.3	1	Boötis, i^1	14 59 10.56	56.4	1	2.018	+ 0.0014	.....
1453	5.3	1	44 Boötis, i^2	14 59 10.84	55.5	2	2.018	+ 0.0014	.....
1454	6.6	4	9 Ursæ Minoris	15 0 18.15	58.4	2	0.104	+ 0.0714	.....
1455	6.0	2	47 Boötis, k	15 0 47.60	57.7	3	1.992	+ 0.0017	- 0.009
1456	...	...	Piazzi xiv. 279 (1st st.)	15 0 47	...	...	2.909	+ 0.0052	.....
1457	...	...	Piazzi xiv. 279 (2nd st.)	15 0 47	...	...	2.909	+ 0.0052	.....
1458	5.1	2	45 Boötis, c	15 1 9.19	58.2	4	2.621	+ 0.0015	.....
1459	5.4	3	24 Libræ, ι^1	15 4 14.88	57.9	11	3.408	+ 0.0171	- 0.002
1460	6.8	3.5	23 Libræ	15 5 18.28	57.8	5	3.518	+ 0.0205	.....
1461	6.6	2.5	25 Libræ, ι^2	15 5 21.20	58.3	6	+ 3.407	+ 0.0170	.....
1462	6.9	11	Groombridge 2213 ...	15 6 12.19	56.4	15	- 6.993	+ 1.1951	.....
1463	6.5	1	W.B. (1) XV. 99	15 6 49.67	61.4	1	+ 3.086	+ 0.0087	.....
1464	8.0	1	*	15 7 12.27	61.4	1	3.086	+ 0.0087	.....
1465	2.0*	...	27 Libræ, β	15 9 28.66	58.7	15	3.225	+ 0.0118	- 0.009
1466	3.0*	...	49 Boötis, δ	15 9 51.58	57.6	5	+ 2.412	+ 0.0009	+ 0.009
1467	8.2	16	Radcliffe 3354	15 11 58.52	57.4	15	- 7.377	+ 1.2327	.....
1468	5.4	2	5 Serpentis	15 12 10.09	58.2	5	+ 3.032	+ 0.0076	+ 0.012
1469	9.3	3	Redhill 2288	15 13 1.04	58.4	3	- 7.243	+ 1.1878	
1470	7.7	5.5	Radcliffe 3362	15 13 39.01	55.5	10	- 11.367	+ 2.4258	

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° ' "	1800+		"	"	"			
100 50 30.6	57.9	2	+ 14.84	- 0.325	+ 0.03	1903	214	15 Libræ, ξ^2
110 46 51.2	61.4	2	14.83	0.342		...	212	Piazzi xiv. 212 (1st st.)
110 46 53.0	60.4	3	14.83	0.342	.....	...	212	Piazzi xiv. 212 (2nd st.)
93 46 23.2	56.9	2	14.79	0.315	.....	1905	220	16 Libræ
100 35 22.7	57.5	1	14.75	- 0.327	.....	1907	225	17 Libræ
15 16 21.2	56.6	7	14.72	+ 0.019	+ 0.03	1917	240	7 Ursæ Minoris, β
100 34 43.6	58.9	4	14.71	- 0.328	.....	1909	228	18 Libræ
39 47 51.2	57.8	3	14.68	0.203	.....	...	235	Piazzi xiv. 235
99 50 17.0	57.8	3	14.47	0.333	.....	...	...	W.B. (1) XIV. 1027
114 43 43.4	57.7	5	14.43	0.361	+ 0.03	1913	251	20 Libræ
49 3 18.5	56.8	3	14.39	- 0.237	+ 0.06	1918	259	42 Boötis, β
3 28 30.7	59.8	3	14.34	+ 1.251	.....	...	...	Groombridge 2210
62 22 8.6	59.7	4	14.31	- 0.270	.....	1921	265	Bradley 1921
62 30 16.1	58.7	4	14.28	0.271	0.00	1922	270	43 Boötis, ψ
105 42 41.6	57.2	5	14.25	0.348	+ 0.02	1919	267	21 Libræ, ν^1
105 56 22.0	61.4	2	14.24	0.349	0.00	1920	269	22 Libræ, ν^2
41 47 59.8	60.7	4	14.23	0.214	.....	1923	275	Boötis, i^1
41 47 56.2	59.2	5	14.23	0.214	.....	...	...	44 Boötis, i^2
17 41 16.7	58.9	3	14.16	0.017	.....	...	2	9 Ursæ Minoris
41 18 23.9	59.1	3	14.13	0.213	.....	1925	...	47 Boötis, k
80 14 4.5	61.5	2	14.14	0.307	.....	...	279	Piazzi xiv. 279 (1st st.)
80 14 0.2	61.5	2	14.14	0.307	.....	...	...	Piazzi xiv. 279 (2nd st.)
64 35 0.3	57.0	2	14.11	0.278	.....	1924	284	45 Boötis, c
109 15 32.4	57.1	7	13.92	0.364	+ 0.04	1927	3	24 Libræ, ι^1
114 46 42.7	57.9	6	13.85	0.377	.....	...	5	23 Libræ
109 7 2.9	55.4	4	13.85	- 0.366	.....	1928	6	25 Libræ, ι^2
5 30 30.8	57.3	8	13.79	+ 0.734	.....	...	...	Groombridge 2213
90 48 23.9	57.4	2	13.75	- 0.334	.....	...	...	W.B. (1) XV. 99
90 49	...	...	13.73	0.334	.....	...	...	*
98 51 49.7	58.0	8	13.58	0.352	+ 0.01	1934	26	27 Libræ, β
56 9 38.9	56.9	4	13.56	- 0.265	+ 0.09	1936	29	49 Boötis, δ
5 25 53.8	58.0	5	13.42	+ 0.794	.....	...	...	Radcliffe 3354
87 42 9.6	57.1	6	13.41	- 0.335	+ 0.54	1937	33	5 Serpentis
5 31 25.3	58.4	1	13.35	+ 0.782		...	...	Redhill 2288
3 57 25.9	58.8	3	+ 13.32	+ 1.233		...	...	Radcliffe 3362

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				h. m. s.	1800+		s.	s.	s.
1471	...	...	Lacaille 6355	15 14 36	...	...	+ 3'565	+ 0'0210	
1472	8.0	4	Piazzi xv. 56.....	15 15 6.10	56.4	4	1'843	+ 0'0040	
1473	Var.	...	Serpentis (S)	15 15 6.42	56.4	2	2'806	+ 0'0042	.....
1474	...	...	30 Libræ, σ^2	15 15 14	...	...	3'335	+ 0'0143	- 0'003
1475	7.5	0.5	Lacaille 6360	15 15 39.06	59.1	3	3'581	+ 0'0214	.....
1476	5.3	2	31 Libræ, ϵ	15 16 36.82	59.5	6	+ 3'247	+ 0'0120	.....
1477	5.1	3	11 Ursæ Minoris	15 17 14.07	57.7	4	- 0'111	+ 0'0753	.....
1478	5.0*	...	2 Coronæ, η	15 17 25.33	58.1	3	+ 2'467	+ 0'0015	+ 0'011
1479	5.0	1	51 Boötis, μ	15 19 12.07	58.0	5	2'278	+ 0'0014	- 0'014
1480	...	...	Groombridge 2227 ...	15 19 14	...	...	2'279	+ 0'0014	.....
1481	4.0*	...	32 Libræ, ζ^1	15 20 21.97	58.1	8	+ 3'371	+ 0'0148	+ 0'002
1482	3.0*	...	13 Ursæ Minoris, γ ...	15 20 58.68	57.6	5	- 0'155	+ 0'0755	.....
1483	3.0*	...	12 Draconis, ι	15 21 49.27	57.7	5	+ 1'325	+ 0'0135	.....
1484	...	...	Piazzi xv. 91.....	15 23 41	...	...	+ 3'443	+ 0'0165	.....
1485	7.2	9	Groombridge 2283 ...	15 24 2.65	58.0	15	-23'535	+ 7'8732	.....
1486	6.7	6	Piazzi xv. 110	15 25 11.88	57.0	5	+ 1'046	+ 0'0209	.....
1487	7.5	2	Lacaille 6425	15 25 36.25	56.0	5	3'553	+ 0'0192	.....
1488	4.5	1	37 Libræ	15 26 31.74	57.8	7	3'249	+ 0'0116	+ 0'019
1489	8.3	2.5	Oeltz. Arg. (N.Z.) 15453	15 27 40.98	58.4	2	0'989	+ 0'0221	.....
1490	4.3*	...	38 Libræ, γ	15 27 41.99	56.7	6	+ 3'341	+ 0'0136	+ 0'002
1491	9.1	4	Redhill 2333.....	15 27 57.69	58.4	2	-38'291	+18'7555	.....
1492	4.0*	...	13 Serpentis, δ^1	15 28 6.95	57.5	4	+ 2'867	+ 0'0051	} - 0'005
1493	3.0*	...	13 Serpentis, δ^2	15 28 7.02	57.5	4	2'867	+ 0'0051	
1494	2.0*	...	5 Coronæ, α	15 28 45.67	58.2	14	2'529	+ 0'0024	+ 0'009
1495	6.0	3	Piazzi xv. 136	15 28 58.44	58.4	4	0'838	+ 0'0268	.....
1496	6.0	1	18 Serpentis, τ^5	15 30 2.18	58.5	1	2'756	+ 0'0039	.....
1497	5.9	1	41 Libræ	15 30 51.26	57.7	6	3'434	+ 0'0156	+ 0'010
1498	...	...	Lacaille 6469	15 31 7.79	58.5	2	3'619	+ 0'0205	.....
1499	...	...	Oeltz. Arg. (S.Z.) 14747	15 31 50.27	60.4	1	3'446	+ 0'0158	.....
1500	5.6	2	42 Libræ	15 32 0.73	57.8	5	3'533	+ 0'0180	- 0'003
1501	7.4	2	W.B. (2) XV. 746 ...	15 32 16.45	61.4	1	2'768	+ 0'0041	.....
1502	7.0	0.5	Lacaille 6485	15 32 58.33	58.0	2	3'662	+ 0'0216	.....
1503	6.4	3	Piazzi xv. 153	15 33 47.19	57.0	5	1'910	+ 0'0039	.....
1504	5.0*	...	45 Libræ, κ	15 33 53.22	57.7	5	3'447	+ 0'0157	- 0'003
1505	6.3	5.5	Coronæ, ζ^1	15 34 5.91	57.8	5	+ 2'259	+ 0'0022	

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° ' "	1800+		"	"	"			
116 10 59.6	61.5	1	+ 13.25	- 0.396		...	...	Lacaille 6355
39 16 39.3	57.9	2	13.22	0.208		...	56	Piazz. xv. 56
75 10 52.1	61.4	2	13.22	0.314	.....	...	...	Serpentis (S)
104 37 53.3	61.5	1	13.21	0.372	- 0.03	1941	50	30 Libræ, σ^2
116 48 6.5	58.0	2	13.18	0.399	.....	...	...	Lacaille 6360
99 48 57.7	55.4	3	13.11	- 0.364	.....	1944	57	31 Libræ, ϵ
17 40 5.6	57.7	3	13.08	+ 0.007	- 0.03	1954	78	11 Ursæ Minoris
59 12 15.2	57.3	4	13.06	- 0.279	+ 0.19	1947	67	2 Coronæ, η
52 7 46.6	59.9	6	12.94	0.259	- 0.09	1950	73	51 Boötis, μ
52 9 32.6	61.4	2	12.94	0.260	.....	...	...	Groombridge 2227
106 13 31.3	58.0	7	12.87	- 0.383	+ 0.05	1949	75	32 Libræ, ζ^1
17 40 5.0	56.9	5	12.82	+ 0.011	- 0.06	1962	95	13 Ursæ Minoris, γ
30 32 32.2	57.3	7	12.77	- 0.154	- 0.04	1957	92	12 Draconis, ι
109 40 56.6	61.4	2	12.64	- 0.395	.....	...	91	Piazz. xv. 91
2 14 12.8	58.1	4	12.62	+ 2.663	.....	...	...	Groombridge 2283
27 14 22.3	57.0	5	12.55	- 0.124	.....	...	110	Piazz. xv. 110
114 38 3.9	57.1	3	12.51	0.411	.....	...	...	Lacaille 6425
99 34 52.8	54.4	3	12.45	0.377	+ 0.23	1960	106	37 Libræ
26 48 33.1	59.5	2	12.37	0.119	.....	...	...	Oeltz. Arg. (N.Z.) 15453
104 19 12.3	59.7	4	12.37	- 0.389	- 0.02	1964	111	38 Libræ, γ
1 27 32.3	58.5	2	12.35	+ 4.395	.....	...	...	Redhill 2333
78 59 28.7	59.8	3	12.34	- 0.335	} - 0.01	1969	117	13 Serpentis, δ^1
78 59 29.4	58.8	5	12.34	0.335				13 Serpentis, δ^2
62 48 42.5	58.6	5	12.30	0.297	+ 0.07	1973	121	5 Coronæ, α
25 19 12.5	57.0	4	12.28	0.101	.....	...	136	Piazz. xv. 136
73 24 54.8	57.5	3	12.21	0.324	.....	1977	131	18 Serpentis, τ^5
108 50 16.0	57.5	3	12.15	0.404	+ 0.05	1975	133	41 Libræ
117 11 0.0	58.5	1	12.13	0.425	.....	...	...	Lacaille 6469
109 18	...	...	12.08	0.406	.....	...	...	Oeltz. Arg. (S.Z.) 14747
113 21 35.7	60.1	3	12.07	0.417	+ 0.02	1978	138	42 Libræ
74 7 23.4	61.5	1	12.05	0.328	.....	...	...	W.B. (2) XV. 746
118 50 43.0	58.3	3	12.00	0.433	.....	...	...	Lacaille 6485
42 44 21.4	56.8	4	11.95	0.228	.....	...	153	Piazz. xv. 153
109 13 18.6	58.9	4	11.94	0.409	+ 0.12	1981	145	45 Libræ, κ
52 54 23.6	60.0	4	+ 11.92	- 0.270		...	...	Coronæ, ζ^1

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				h. m. s.	1800+		s.	s.	s.
1506	4.8	4	7 Coronæ, ζ^2	15 34 6.41	57.2	5	+ 2.259	+ 0.0022	
1507	7.7	4	Redhill 2342	15 34 26.90	58.5	2	- 7.798	+ 1.1006	
1508	6.9	4	Piazzi xv. 150	15 34 54.13	57.3	5	+ 3.372	+ 0.0139	.....
1509	6.7	2.5	Bradley 1987	15 35 34.14	57.4	4	+ 3.353	+ 0.0134	.....
1510	5.5	1	15 Ursæ Minoris, θ ...	15 35 38.80	57.5	1	- 1.932	+ 0.1942	.....
1511	4.5*	...	44 Libræ, η	15 36 12.20	56.4	6	+ 3.367	+ 0.0136	+ 0.001
1512	7.5	2	W.B. (1) XV. 699 ...	15 36 43.19	61.5	3	3.017	+ 0.0072	.....
1513	6.0	5	23 Serpentis, ψ	15 36 59.56	59.2	5	3.016	+ 0.0072	.....
1514	2.3*	...	24 Serpentis, α	15 37 22.43	58.4	15	2.941	+ 0.0062	+ 0.009
1515	7.7	1	Lalande 28670	15 37 30.34	57.4	2	3.562	+ 0.0182	.....
1516	8.5	1	Lacaille 6531	15 39 48.23	57.1	5	3.662	+ 0.0206	.....
1517	...	...	1 Scorpil, b	15 42 34.00	58.0	2	3.594	+ 0.0184	- 0.005
1518	Var.	...	Coronæ (R)	15 42 48.41	57.5	10	2.470	+ 0.0025	.....
1519	3.3*	...	37 Serpentis, ϵ	15 43 50.31	60.0	8	2.977	+ 0.0066	+ 0.010
1520	6.0	1	Piazzi xv. 198	15 44 32.65	56.5	3	0.891	+ 0.0226	.....
1521	5.1	2	2 Scorpil, A	15 45 12.93	58.4	1	3.589	+ 0.0180	.....
1522	4.7*	...	46 Libræ, θ	15 45 51.55	57.8	8	3.398	+ 0.0136	+ 0.009
1523	5.1	2	11 Coronæ, κ	15 45 57.44	57.5	5	2.259	+ 0.0026	- 0.003
1524	5.6	0.5	3 Scorpil	15 46 15.50	56.4	1	3.588	+ 0.0179	- 0.003
1525	6.7	5	39 Serpentis	15 46 41.03	59.5	4	2.801	+ 0.0047	.....
1526	6.0*	...	4 Scorpil	15 47 2.80	55.5	2	3.614	+ 0.0184	- 0.003
1527	4.8	1	1 Herculis, χ	15 47 50.10	57.6	5	2.033	+ 0.0034	+ 0.037
1528	...	...	5 Scorpil, ρ	15 48 14.93	60.0	2	+ 3.689	+ 0.0201	- 0.004
1529	4.3*	...	16 Ursæ Minoris, ζ ...	15 49 8.72	57.4	2	- 2.323	+ 0.2045	.....
1530	7.0	12	Radcliffe 3475	15 49 22.04	57.2	16	- 10.558	+ 1.5521	.....
1531	6.1	1.5	2 Herculis	15 49 57.89	54.5	3	+ 2.001	+ 0.0036	.....
1532	3.7*	...	41 Serpentis, γ	15 49 59.36	59.7	6	2.746	+ 0.0043	+ 0.023
1533	9.3	0.5	Piazzi xv. 220 (1st star)	15 50 15	...	...	2.997	+ 0.0068	.....
1534	7.7	0.5	Piazzi xv. 220 (2nd star)	15 50 15	...	...	2.997	+ 0.0068	.....
1535	6.0*	...	6 Scorpil, π	15 50 23.37	56.4	2	3.616	+ 0.0180	.....
1536	3.0*	...	7 Scorpil, δ	15 52 3.62	57.1	5	3.535	+ 0.0160	- 0.001
1537	5.8	2	49 Libræ	15 52 28.43	57.1	5	3.400	+ 0.0131	- 0.049
1538	7.0	1	Lacaille 6656	15 54 45.10	61.5	1	3.637	+ 0.0180	.....
1539	5.7*	...	5 Herculis, r	15 54 57.05	57.8	3	2.697	+ 0.0040	
1540	5.4	3	15 Coronæ, ρ	15 55 41.47	60.0	4	+ 2.308	+ 0.0028	[- 0.013]

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° ' "	+1800		"	"	"			
52 54 27.0	59.0	4	+ 11.92	— 0.270		...	152	7 Coronæ, ζ^2
5 39 18.4	59.0	2	11.90	+ 0.911		...	...	Redhill 2342
105 33 42.9	59.8	3	11.87	— 0.402	.....	...	150	Piazz. xv. 150
104 35 28.4	58.7	3	11.82	— 0.400	+ 0.14	1987	...	Bradley 1987
12 11 9.5	59.5	2	11.81	+ 0.223	— 0.01	2008	172	15 Ursæ Minoris, θ
105 13 26.3	58.5	2	11.77	— 0.403	+ 0.06	1985	157	44 Libræ, η
87 7	...	...	11.74	0.362	.....	...	...	W.B. (1) XV. 699
87 1 57.1	55.8	3	11.71	0.362	.....	1989	160	23 Serpentis, ψ
83 7 53.0	57.9	4	11.69	0.354	— 0.05	1990	163	24 Serpentis, α
114 16 19.3	61.4	1	11.68	0.427	.....	...	...	Lalande 28670
118 21 10.0	57.7	5	11.52	0.442	.....	...	...	Lacaille 6531
115 19 19.8	57.9	5	11.32	0.438	+ 0.02	2000	177	1 Scorpii, δ
61 24 39.6	55.2	4	11.30	0.303	.....	...	185	Coronæ (R)
85 5 53.4	58.5	7	11.23	0.365	— 0.07	2005	187	37 Serpentis, ϵ
26 58 3.0	57.1	3	11.18	0.112	.....	...	198	Piazz. xv. 198
114 54 19.1	60.4	3	11.13	0.440	.....	2006	189	2 Scorpii, A
106 18 54.4	56.1	3	11.08	0.418	.....	2011	193	46 Libræ, θ
53 54 20.4	56.4	2	11.07	0.280	— 0.12	2018	200	11 Coronæ, κ
114 49 30.4	60.4	3	11.05	0.442	+ 0.35	2012	195	3 Scorpii
76 21 45.7	59.0	2	11.02	0.347	.....	2016	202	39 Serpentis
115 50 57.2	58.7	4	11.00	0.446	.....	2014	196	4 Scorpii
47 9 17.0	56.4	1	10.94	0.253	— 0.61	2021	211	1 Herculis, χ
118 48 7.1	60.0	4	10.91	— 0.456	+ 0.03	2017	207	5 Scorpii, ρ
11 46 32.5	55.0	4	10.84	+ 0.280	+ 0.08	2041	238	16 Ursæ Minoris, ζ
4 43 14.2	58.4	2	10.83	+ 1.291	.....	...	...	Radcliffe 3475
46 27 6.4	58.5	2	10.78	— 0.251	.....	2025	221	2 Herculis
73 52 41.7	58.0	4	10.78	0.342	.....	2023	219	41 Serpentis, γ
86 11 6.0	61.4	1	10.76	0.374	.....	...	220	Piazz. xv. 220 (1st star)
86 11 14.4	61.4	1	10.76	0.374	.....	...	220	Piazz. xv. 220 (2nd star)
115 42 28.6	59.9	2	10.75	0.450	.....	2020	216	6 Scorpii, π
112 13 12.8	57.8	6	10.62	0.442	+ 0.01	2024	225	7 Scorpii, δ
106 7 4.4	56.5	4	10.59	0.426	+ 0.37	2026	228	49 Libræ
116 19 1.9	57.5	1	10.42	0.458	.....	...	...	Lacaille 6656
71 47 32.4	56.8	3	10.41	0.342		2032	241	5 Herculis, r
56 16 18.3	57.1	3	+ 10.35	— 0.293	+ 0.75	2037	246	15 Coronæ, ρ

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				h. m. s.	1800+		s.	s.	s.
1541	7.0?	0.5	Lacaille 6666	15 55 51.63	58.3	5	+ 3.695	+ 0.0192	
1542	4.6	1	51 Libræ 1 & 2 (centre)	15 56 40.30	58.9	5	3.295	+ 0.0110	— 0.008
1543	7.5	1.5	51 Libræ (3rd star)...	15 56 40.95	57.5	2	3.295	+ 0.0110	.....
1544	2.0*	...	8 Scorpïi, β^1	15 57 18.07	58.1	9	3.477	+ 0.0142	— 0.002
1545	4.5	1	Scorpïi, β^2	15 57 18.52	57.2	5	+ 3.477	+ 0.0142	.....
1546	6.9	2	17 Ursæ Minoris.....	15 58 24.46	58.8	3	— 1.545	+ 0.1309	.....
1547	3.7*	...	13 Draconis, θ	15 59 16.36	58.3	4	+ 1.154	+ 0.0147	.....
1548	7.0	3	Piazzi xv. 264.....	15 59 31.91	58.1	5	3.670	+ 0.0182	.....
1549	...	...	Herculis (R) var....	16 0 0	...	...	2.680	+ 0.0039	.....
1550	5.2	2	7 Herculis, κ^1	16 1 45.42	61.5	1	2.707	+ 0.0040	.....
1551	6.5	1	Herculis, κ^2	16 1 46	...	...	2.707	+ 0.0040	.....
1552	...	...	13 Scorpïi, c^2	16 3 41.40	58.4	2	3.682	+ 0.0178	+ 0.004
1553	5.1	2	16 Coronæ, τ	16 3 51.23	57.7	6	2.196	+ 0.0031	— 0.001
1554	4.4	2	11 Herculis, ϕ	16 4 21.55	55.6	5	+ 1.889	+ 0.0046	.....
1555	6.6	5	Radcliffe 3523.....	16 5 33.19	56.4	7	— 12.529	+ 1.7569	.....
1556	6.5	3	14 Herculis.....	16 5 51.90	57.4	5	+ 1.930	+ 0.0043	.....
1557	7.2	6	Radcliffe 3522.....	16 6 20.05	57.2	11	— 8.148	+ 0.8607	.....
1558	10.7	1	*	16 6 36	...	...	+ 3.473	+ 0.0131	.....
1559	7.7	6	49 Serpenti (1st st.)	16 6 46.79	57.6	5	2.781	+ 0.0046	.....
1560	7.6	4.5	49 Serpenti (2nd st.)	16 6 47.00	57.8	5	2.781	+ 0.0046	.....
1561	3.0*	...	1 Ophiuchi, δ	16 7 0.68	58.8	12	3.141	+ 0.0082	— 0.006
1562	5.6	3	18 Scorpïi	16 8 0.78	59.5	2	3.238	+ 0.0094	[+ 0.014]
1563	6.2	2	17 Coronæ, σ (N. star)	16 9 26.18	58.5	4	2.267	+ 0.0031	— 0.028
1564	...	...	17 Coronæ, σ (S. star)	16 9 26	...	...	2.267	+ 0.0031	.....
1565	...	...	2 Ophiuchi, ϵ	16 10 55.06	58.4	3	3.162	+ 0.0083	+ 0.005
1566	8.0	1	Piazzi xvi. 48	16 12 19	...	...	3.501	+ 0.0131	.....
1567	9.0	1	Piazzi xvi. 49	16 12 20	...	...	3.501	+ 0.0131	.....
1568	3.3*	...	20 Scorpïi, σ	16 12 41.02	56.8	5	3.635	+ 0.0156	+ 0.003
1569	7.6	7	Piazzi xvi. 69	16 13 47.51	57.3	5	+ 0.292	+ 0.0338	.....
1570	6.0	2	19 Ursæ Minoris.....	16 14 52.22	57.7	4	— 1.819	+ 0.1271	.....
1571	...	...	Herculis, γ^1	16 15 44	...	...	+ 2.647	+ 0.0039	.....
1572	3.0*	...	20 Herculis, γ^2	16 15 44.67	59.8	15	2.647	+ 0.0039	— 0.004
1573	7.5	3	Piazzi xvi. 61	16 15 54.05	57.7	5	3.680	+ 0.0161	.....
1574	5.5	3	4 Ophiuchi, ψ	16 15 54.92	58.7	6	+ 3.502	+ 0.0128	— 0.004
1575	6.4	3	20 Ursæ Minoris.....	16 16 5.98	58.5	3	— 1.593	+ 0.1128	.....

1571. This star (the companion of γ Herculis, of the 10th mag.) has not been observed. It was inserted in the MS. owing to a mistake, and is retained to prevent derangement of the printing.

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
118 32 32.7	60.5	3	+ 10.34	- 0.467	.....	...	...	Lacaille 6666
100 59 1.8	59.6	5	10.28	0.418	.....	2033	245	51 Libræ 1 & 2 (centre)
100 58 57.6	60.9	4	10.28	0.418	.....	...	...	51 Libræ (3rd star)
109 25 7.2	57.6	5	10.23	0.441	+ 0.02	2034	251	8 Scorpïi, β^1
109 24 54.4	58.2	5	10.23	- 0.441	.....	...	252	Scorpïi, β^2
14 1	...	...	10.15	+ 0.190	.....	2063	288	17 Ursæ Minoris
31 3 35.9	57.4	7	10.08	- 0.150	- 0.33	2053	277	13 Draconis, θ
117 21 7.3	58.2	4	10.06	0.468	.....	...	264	Piazzi xv. 264
71 16 51.1	59.5	1	10.03	0.342	.....	...	...	Herculis (R) var.
72 34 37.6	61.5	3	9.90	0.348	.....	2049	284	7 Herculis, κ^1
72 34 8.1	61.5	2	9.90	0.348	.....	2050	285	Herculis, κ^2
117 33 32.7	57.7	3	9.75	0.474	+ 0.01	2052	2	13 Scorpïi, c^2
53 9 4.1	56.7	5	9.74	0.284	- 0.35	2058	9	16 Coronæ, τ
44 41 46.9	57.6	5	9.70	- 0.245	- 0.04	2061	13	11 Herculis, ϕ
4 18 9.0	56.4	2	9.61	+ 1.600	.....	...	...	Radcliffe 3523
45 48 18.8	56.8	3	9.58	- 0.251	+ 0.34	2068	22	14 Herculis
5 59 0.4	60.0	2	9.54	+ 1.041	.....	...	...	Radcliffe 3522
106 22 14.3	58.5	1	9.52	- 0.455	.....	...	...	*
76 5 43.7	60.7	4	9.51	0.361	.....	2066	23	49 Serpentis (1st st.)
76 5 46.6	60.7	4	9.51	0.361	.....	2066	23	49 Serpentis (2nd st.)
93 19 52.3	56.5	2	9.49	0.408	+ 0.13	2065	21	1 Ophiuchi, δ
97 59 43.7	57.8	3	9.41	0.421	[+ 0.50]	2067	26	18 Scorpïi
55 47 3.6	58.7	5	9.30	0.297	+ 0.04	2074	38	17 Coronæ, σ (N. star)
55 47 4.3	61.5	2	9.30	0.297	.....	2074	38	17 Coronæ, σ (S. star)
94 21	61.5	1	9.19	0.414	- 0.04	2073	41	2 Ophiuchi, ϵ
109 46 35.8	61.5	1	9.08	0.456	.....	...	48	Piazzi xvi. 48
109 46 24.6	61.5	1	9.08	0.456	.....	...	49	Piazzi xvi. 49
115 15 9.2	56.4	5	9.05	0.477	- 0.01	2077	50	20 Scorpïi, σ
23 16 32.4	57.8	9	8.97	- 0.041	.....	...	69	Piazzi xvi. 69
13 46 19.3	56.3	4	8.88	+ 0.234	0.00	2096	82	19 Ursæ Minoris
70 31	...	...	8.81	- 0.351	.....	...	...	Herculis, γ^1
70 30 54.7	59.5	8	8.81	0.351	- 0.06	2084	66	20 Herculis, γ^2
116 49 15.9	60.0	4	8.80	0.486	.....	...	61	Piazzi xvi. 61
109 42 23.1	58.5	2	8.80	- 0.463	+ 0.06	2082	64	4 Ophiuchi, ψ
14 26 39.8	57.4	1	+ 8.78	+ 0.205		2099	86	20 Ursæ Minoris

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				h. m. s.	1800+		s.	s.	s.
1576	...	...	5 Ophiuchi, ρ (N. star)	16 17 12	...	...	+ 3.586	+ 0.0141	
1577	...	...	5 Ophiuchi, ρ (S. star)	16 17 12	...	...	3.586	+ 0.0141	— 0.002
1578	7.1	2.5	Lacaille 6843	16 18 44.58	57.7	5	3.741	+ 0.0168	.....
1579	1.3*	...	21 Scorpii, α	16 20 49.70	58.4	18	+ 3.667	+ 0.0151	— 0.001
1580	5.0	2	21 Ursæ Minoris, η ...	16 21 38.70	56.9	5	— 1.832	+ 0.1190	.....
1581	2.7*	...	14 Draconis, η	16 22 6.08	58.5	7	+ 0.800	+ 0.0189	+ 0.023
1582	9.7	4	Redhill 2463.....	16 22 46.99	58.5	2	— 16.231	+ 2.2699	.....
1583	...	...	10 Ophiuchi, λ	16 23 51.16	61.5	2	+ 3.023	+ 0.0063	0.000
1584	2.3*	...	27 Herculis, β	16 24 12.18	58.1	7	2.584	+ 0.0036	— 0.009
1585	5.7	4	B. F. 2269.....	16 24 28.88	58.5	5	2.608	+ 0.0037	.....
1586	Var.	...	Ophiuchi (S)	16 26 12.19	57.5	3	3.444	+ 0.0190	.....
1587	3.3*	...	23 Scorpii, τ	16 27 10.37	57.0	10	3.723	+ 0.0152	— 0.001
1588	5.3	3.5	12 Ophiuchi	16 29 0.22	56.9	5	3.116	+ 0.0069	+ 0.026
1589	...	...	13 Ophiuchi, ζ	16 29 27.11	61.5	4	3.296	+ 0.0088	+ 0.001
1590	7.7	3	W.B. (1) XVI. 568 ...	16 30 8.73	61.5	4	2.832	+ 0.0048	.....
1591	6.0	5	Piazzi xvi. 140	16 30 27.35	56.7	5	+ 0.831	+ 0.0169	.....
1592	9.0	4.5	Redhill 2494.....	16 32 59.11	58.5	3	— 42.744	+ 11.7929	.....
1593	5.6	3.5	Bradley 2114	16 33 28.78	57.5	5	+ 3.463	+ 0.0105	— 0.004
1594	7.0	1	38 Herculis	16 34 35.19	60.8	3	2.960	+ 0.0054	.....
1595	6.9	4.5	Lacaille 6957	16 35 13.19	57.7	5	3.695	+ 0.0136	.....
1596	2.7*	...	40 Herculis, ζ	16 36 0.57	58.1	16	+ 2.296	+ 0.0033	— 0.034
1597	6.6	2	Piazzi xvi. 195	16 36 43.25	58.5	2	— 2.669	+ 0.1421	.....
1598	6.8	1	15 Ophiuchi	16 36 43.72	58.7	4	+ 3.600	+ 0.0121	.....
1599	7.9	1	Lacaille 6972	16 36 47.58	57.5	2	3.753	+ 0.0143	.....
1600	3.0*	...	44 Herculis, η	16 38 5.79	55.7	5	2.051	+ 0.0038	+ 0.002
1601	6.7	2	41 Herculis	16 38 10.89	58.2	3	2.932	+ 0.0052	— 0.017
1602	6.7	3.5	25 Scorpii.....	16 38 17.36	57.3	5	+ 3.663	+ 0.0127	+ 0.001
1603	7.3	4	Redhill 2501.....	16 39 26.59	58.5	2	— 8.863	+ 0.6725	.....
1604	3.0*	...	26 Scorpii, ϵ	16 41 6.28	57.1	5	+ 3.922	+ 0.0162	— 0.051
1605	7.4	3	Radcliffe 3604	16 42 45	...	...	1.231	+ 0.0096	.....
1606	7.3	2.5	Piazzi xvi. 219	16 43 59.06	57.1	5	1.222	+ 0.0096	.....
1607	7.3	3	Lacaille 7043	16 45 45.23	57.5	3	3.678	+ 0.0120	.....
1608	8.3	3.5	Oeltz. Arg. (s. z.) 16082	16 45 56.35	57.8	3	+ 3.679	+ 0.0119	.....
1609	8.4	2	Redhill 2517.....	16 46 23.11	60.0	2	— 17.707	+ 1.9488	
1610	8.3	1	Piazzi xvi. 236 (1st st.)	16 48 50	...	...	+ 3.518	+ 0.0097	

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° ' "	1800+		"	"	"			
113 7 12.0	61.5	2	+ 8.70	- 0.475		2083	71	5 Ophiuchi, ρ (N. star)
113 7 15.5	61.5	2	8.70	0.475	- 0.01	2083	71	5 Ophiuchi, ρ (S. star)
118 58 3.6	57.2	5	8.57	0.497	.....	...	...	Lacaille 6843
116 7 2.9	57.2	10	8.41	- 0.489	+ 0.03	2091	84	21 Scorpii, α
13 55 28.0	56.7	6	8.35	+ 0.239	- 0.26	2111	114	21 Ursæ Minoris, η
28 10 6.7	57.5	3	8.31	- 0.110	- 0.08	2104	102	14 Draconis, η
3 36 43.6	58.5	2	8.26	+ 2.153	.....	...	...	Redhill 2463
87 42 24.5	61.5	1	8.17	- 0.406	+ 0.05	2097	100	10 Ophiuchi, λ
68 12 8.2	58.2	5	8.15	0.348	0.00	2100	103	27 Herculis, β
69 12 43.1	57.5	1	8.13	0.351	.....	...	...	B. F. 2269
106 51 44.8	57.5	2	7.98	0.464	.....	...	...	Ophiuchi (S)
117 55 18.7	58.6	10	7.90	0.503	+ 0.02	2103	113	23 Scorpii, τ
92 1 21.4	56.7	8	7.76	0.423	+ 0.31	2108	121	12 Ophiuchi
100 17	...	...	7.72	0.447	- 0.03	2109	123	13 Ophiuchi, ζ
78 59 30.3	61.5	2	7.66	0.385	.....	...	...	W.B. (1) XVI. 568
28 52 57.8	57.2	7	7.64	- 0.108	.....	...	140	Piazzi xvi. 140
1 33 9.0	59.5	3	7.43	+ 5.787	.....	...	...	Redhill 2494
107 28 5.9	56.5	3	7.39	- 0.473	- 0.01	2114	...	Bradley 2114
84 51 16.5	57.8	4	7.30	0.406	.....	2121	156	38 Herculis
116 32 13.9	58.0	2	7.25	0.506	.....	...	...	Lacaille 6957
58 8 27.8	57.5	7	7.19	- 0.316	- 0.45	2127	165	40 Herculis, ζ
12 17	...	...	7.13	+ 0.361	.....	...	195	Piazzi xvi. 195
112 55 11.5	59.0	2	7.13	- 0.494	.....	2123	162	15 Ophiuchi
118 34 40.4	60.5	3	7.12	0.515	.....	...	...	Lacaille 6972
50 48 33.3	57.5	2	7.01	0.284	+ 0.07	2133	173	44 Herculis, η
83 38 23.8	56.6	1	7.01	0.404	[+ 0.16]	2130	169	41 Herculis
115 16 10.6	58.0	4	7.00	- 0.504	.....	2126	168	25 Scorpii
6 0 15.4	58.5	3	6.90	+ 1.211	.....	...	...	Redhill 2501
124 2	...	...	6.77	- 0.541	+ 0.33	2132	184	26 Scorpii, ϵ
34 25 54.1	58.7	5	6.63	0.173	.....	...	...	Radcliffe 3604
34 20 27.1	56.3	7	6.53	0.172	.....	...	219	Piazzi xvi. 219
115 35 35.2	58.5	4	6.38	0.512	.....	...	...	Lacaille 7043
115 34 44.4	59.7	5	6.37	- 0.512	.....	...	...	Oeltz. Arg. (S. Z.) 16082
3 29 37.1	58.4	2	6.33	+ 2.447		...	...	Redhill 2517
109 18 54.4	61.5	2	+ 6.13	- 0.491		...	...	Piazzi xvi. 236 (1st st.)

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° ' "	1800+		"	"	"			
109 18 50.5	61.5	2	+ 6.13	— 0.491		...	236	Piazzi xvi. 236 (2nd st.)
80 24 16.0	56.6	7	5.94	0.400	— 0.02	2156	252	27 Ophiuchi, κ
114 52 32.9	55.9	3	5.92	0.513	.....	2153	248	Bradley 2153
102 58 49.9	59.5	3	5.92	0.472	.....	...	...	W.B. (1) XVI. 962
114 46 18.0	59.8	4	5.90	0.513	+ 0.08	2155	249	26 Ophiuchi
103 20 38.1	57.7	4	5.75	0.474	.....	...	260	Piazzi xvi. 260
110 17 43.5	61.5	1	5.72	0.498	.....	...	...	Serpentis (T)
58 51 53.9	59.5	2	5.62	0.324	— 0.04	2161	272	58 Herculis, ϵ
24 39 4.4	56.9	6	5.59	0.041	— 0.03	2169	286	19 Draconis, h^1
115 29 38.7	60.0	2	5.58	0.518	.....	...	269	28 Ophiuchi
115 26 29.7	58.7	5	5.52	0.519	.....	2160	271	31 Ophiuchi
33 6 17.5	57.4	5	5.46	0.157	.....	...	291	Piazzi xvi. 291
76 12	...	...	5.42	0.390	+ 0.02	2164	283	Bradley 2164
76 13 41.0	55.3	4	5.40	0.390	+ 0.13	2166	285	Bradley 2166
54 23 9.4	57.7	3	5.32	0.305	.....	2168	295	61 Herculis, c
105 54 9.0	59.1	3	5.21	— 0.486	.....	...	...	Ophiuchi (R)
7 44 19.6	57.2	9	5.15	+ 0.905	— 0.01	2201	36	22 Ursæ Minoris, ϵ
105 32 53.2	57.8	10	4.99	— 0.487	— 0.12	2171	306	35 Ophiuchi, η
31 32 51.1	57.1	4	4.78	0.138	.....	...	20	Piazzi xvii. 20
65 35 19.8	57.5	4	4.74	0.354	.....	2177	11	63 Herculis
116 48 47.1	57.2	3	4.73	0.531	.....	2174	6	Bradley 2174
65 34 27.2	57.6	2	4.73	— 0.354	.....	...	...	Lalande 31308
5 6 44.4	55.8	3	4.65	+ 1.625	.....	...	...	Radcliffe 3685
28 39 55.6	59.5	3	4.64	— 0.100	.....	...	...	Groombridge 2423
116 23 36.5	58.9	7	4.62	0.530	+ 1.12	2176	17	36 Ophiuchi, A^1
116 23 32.3	59.0	6	4.62	0.530	.....	2176	17	36 Ophiuchi, A^2
116 20 24.0	60.0	2	4.55	0.530	[+ 1.15]	2179	21	Bradley 2179
115 8 38.1	55.9	3	4.53	0.526	.....	2180	...	Bradley 2180
75 26 47.5	59.5	3	4.49	0.391	— 0.04	2183	29	64 Herculis, α^1
75 26 53.2	56.6	1	4.49	0.391	.....	...	...	Herculis, α^2
24 6 47.0	56.3	4	4.48	0.025	— 0.07	2193	42	22 Draconis, ζ
64 59 56.7	61.5	1	4.40	0.353	.....	...	...	Herculis, δ (S. star)
64 59 35.9	59.5	2	4.40	0.535	+ 0.15	2185	35	65 Herculis, δ (N. star)
113 54 48.6	57.6	1	4.38	0.522		2182	33	Bradley 2182
110 57 31.5	56.6	6	+ 4.12	— 0.512	+ 0.21	2186	47	40 Ophiuchi, ξ

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				h. m. s.	1800+		s.	s.	s.
1646	4.8	1	69 Herculis, <i>e</i>	17 12 50.64	56.0	6	+ 2.070	+ 0.0033	— 0.003
1647	8.5	21	Radcliffe 3750	17 12 53.70	56.2	22	— 104.265	+ 34.5703	
1648	7.0	3.5	Bradley 2188	17 13 6.53	57.1	5	+ 3.676	+ 0.0081	— 0.006
1649	7.1	6	Piazzi xvii. 69	17 13 14.95	57.9	5	1.520	+ 0.0052	.....
1650	3.3*	...	42 Ophiuchi, <i>θ</i>	17 13 24.83	58.7	16	3.679	+ 0.0081	— 0.003
1651	7.4	4	Piazzi xvii. 62	17 14 33.61	58.0	4	3.682	+ 0.0080	.....
1652	5.8	4	72 Herculis, <i>ω</i>	17 15 25.34	59.5	4	2.232	+ 0.0031	.....
1653	7.7	2	Lalande 31627	17 15 28.56	61.5	3	2.136	+ 0.0031	.....
1654	7.3	1.5	Piazzi xvii. 82	17 17 19.52	57.1	3	3.755	+ 0.0082	.....
1655	7.3	1	Lacaille 7284	17 17 25.91	56.6	3	3.779	+ 0.0084	.....
1656	4.8	1	44 Ophiuchi, <i>b</i>	17 17 49.47	57.7	5	3.658	+ 0.0074	— 0.002
1657	6.2	4	73 Herculis	17 18 15.13	57.7	5	2.512	+ 0.0030	.....
1658	5.0*	...	45 Ophiuchi, <i>d</i>	17 18 25.10	58.2	3	3.823	+ 0.0085	.....
1659	6.8	2.5	Piazzi xvii. 90	17 18 42.27	56.9	3	3.819	+ 0.0085	.....
1660	7.4	5	W.B. (1) XVII. 322...	17 18 47.56	60.0	4	3.020	+ 0.0040	.....
1661	...	...	75 Herculis, <i>ρ</i> ¹	17 18 50.81	61.6	1	2.070	+ 0.0032	.....
1662	...	...	75 Herculis, <i>ρ</i> ²	17 18 51.14	61.6	3	2.070	+ 0.0032	— 0.002
1663	6.4	3	Bradley 2208	17 19 36.22	57.2	3	2.077	+ 0.0033	.....
1664	7.2	2	Piazzi xvii. 100	17 20 0.64	58.3	4	3.697	+ 0.0074	.....
1665	7.8	3	*	17 22 57.08	61.5	2	2.357	+ 0.0029	.....
1666	2.7*	...	23 Draconis, <i>β</i>	17 27 16.12	57.6	12	1.353	+ 0.0051	— 0.001
1667	2.0*	...	55 Ophiuchi, <i>α</i>	17 28 26.13	57.1	26	2.774	+ 0.0031	+ 0.004
1668	5.0	5	24 Draconis, <i>ν</i> ¹	17 29 25.25	56.9	5	1.160	+ 0.0058	+ 0.030
1669	5.0	4	25 Draconis, <i>ν</i> ²	17 29 30.54	56.8	5	+ 1.160	+ 0.0058	+ 0.017
1670	5.1	4	27 Draconis, <i>f</i>	17 32 31.81	56.3	5	— 0.251	+ 0.0153	— 0.007
1671	6.1	4	26 Draconis	17 33 32.72	57.0	5	+ 0.576	+ 0.0086	.....
1672	7.3	2	Piazzi xvii. 191	17 33 55.45	61.5	2	2.467	+ 0.0027	.....
1673	7.0	2	Lalande 32288	17 35 0.00	61.6	1	2.969	+ 0.0031	.....
1674	6.7	4	Bradley 2228 (1st st.)	17 35 20.49	61.0	4	2.463	+ 0.0026	.....
1675	9.3	2	Bradley 2228 (2nd st.)	17 35 20.78	61.6	1	2.463	+ 0.0026	.....
1676	3.7	1	85 Herculis, <i>ι</i>	17 35 30.75	57.1	10	1.691	+ 0.0037	+ 0.014
1677	7.7	1	Piazzi xvii. 207	17 35 58	...	...	+ 2.462	+ 0.0026	.....
1678	7.5	19	Radcliffe 3749	17 36 5.93	56.3	23	— 11.330	+ 0.2974	.....
1679	3.5	1	60 Ophiuchi, <i>β</i>	17 36 33.38	59.0	11	+ 2.964	+ 0.0030	— 0.005
1680	7.0	5	29 Draconis	17 36 33.52	57.6	3	— 1.663	+ 0.0279	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
52 33 35.1	57.3	4	+ 4.10	- 0.297	- 0.08	2195	59	69 Herculis, <i>e</i>
0 41 55.6	57.2	7	4.10	+14.885	.....	...	...	Radcliffe 3750
114 45 38.7	57.1	5	4.07	- 0.527	+ 0.08	2188	51	Bradley 2188
40 9 26.4	58.4	4	4.06	0.219	.....	...	69	Piazzi xvii. 69
114 51 20.6	57.7	13	4.05	0.527	- 0.02	2189	53	42 Ophiuchi, <i>θ</i>
114 57 32.0	57.6	4	3.95	0.528	.....	...	62	Piazzi xvii. 62
57 20 55.2	57.6	3	3.88	0.321	.....	2199	80	72 Herculis, <i>ω</i>
54 29 9.6	61.5	1	3.87	0.308	.....	...	...	Lalande 31627
117 28 6.6	61.5	1	3.72	0.540	.....	...	82	Piazzi xvii. 82
118 17 11.2	60.2	3	3.71	0.543	.....	...	...	Lacaille 7284
114 2 30.9	57.2	4	3.67	0.526	+ 0.12	2198	83	44 Ophiuchi, <i>b</i>
66 54 24.7	55.9	3	3.63	0.362	+ 0.02	2204	97	73 Herculis
119 44 12.1	56.6	4	3.62	0.550	.....	2200	86	45 Ophiuchi, <i>d</i>
119 35 55.1	59.0	4	3.60	0.549	.....	...	90	Piazzi xvii. 90
87 42 55.4	61.5	2	3.59	0.435	.....	...	...	W.B. (1) XVII. 322
52 43 18.4	61.5	2	3.58	0.299	.....	2207	105	75 Herculis, <i>ρ</i> ¹
52 43 20.7	61.5	2	3.58	0.299	- 0.02	...	...	75 Herculis, <i>ρ</i> ²
52 55 17.4	56.5	2	3.52	0.300	.....	2208	...	Bradley 2208
115 23 20.0	57.5	3	3.48	0.532	.....	...	100	Piazzi xvii. 100
61 33 33.4	61.5	2	3.23	0.340	.....	...	...	*
37 35 36.2	57.6	15	2.85	0.197	- 0.03	2221	155	23 Draconis, <i>β</i>
77 20 5.4	57.5	11	2.75	0.402	+ 0.20	2218	153	55 Ophiuchi, <i>a</i>
34 43 9.6	57.4	8	2.67	0.169	- 0.06	2222	168	24 Draconis, <i>ν</i> ¹
34 43 50.4	57.2	7	2.66	- 0.169	- 0.03	2224	169	25 Draconis, <i>ν</i> ²
21 46 34.4	57.1	8	2.40	+ 0.035	- 0.11	2234	198	27 Draconis, <i>f</i>
28 1 4.0	57.0	5	2.31	- 0.085	.....	...	201	26 Draconis
65 30 20.3	61.5	2	2.27	0.358	.....	...	191	Piazzi xvii. 191
85 33 34.2	61.6	2	2.18	0.431	.....	...	...	Lalande 32288
65 24 53.1	60.5	3	2.15	0.359	.....	2228	200	Bradley 2228 (1st st.)
65 24 35.2	61.5	2	2.15	0.359	.....	...	...	Bradley 2228 (2nd st.)
43 55 1.8	56.1	9	2.14	0.246	- 0.01	2233	211	85 Herculis, <i>ι</i>
65 21 14.2	57.6	3	2.09	- 0.358	.....	...	207	Piazzi xvii. 207
5 16 31.3	56.9	3	2.09	+ 1.715	.....	...	...	Radcliffe 3749
85 22 14.8	57.5	7	2.05	- 0.431	- 0.17	2229	209	60 Ophiuchi, <i>β</i>
15 41 18.4	57.8	2	+ 2.05	+ 0.240	- 0.04	2240	242	29 Draconis

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				h. m. s.	1800+		s.	s.	s.
1681	6.0	4	84 Herculis	17 37 36.90	56.9	5	+ 2.468	+ 0.0025	
1682	5.3	1	28 Draconis, ω	17 37 46.51	59.4	5	- 0.363	+ 0.0139	+ 0.003
1683	5.4	2	3 Sagittarii	17 38 45.10	57.8	4	+ 3.773	+ 0.0049	.....
1684	7.7	1	Piazzi xvii. 226.....	17 39 5.70	58.6	1	2.937	+ 0.0028	.....
1685	7.0	2	Lalande 32461	17 39 49.86	61.5	2	2.936	+ 0.0027	.....
1686	3.3*	...	86 Herculis, μ	17 40 58.78	59.0	22	2.369	+ 0.0026	- 0.026
1687	6.4	7.5	Piazzi xvii. 255.....	17 42 43.06	56.1	5	2.605	+ 0.0025	.....
1688	5.9	5	87 Herculis	17 43 8.51	57.3	5	+ 2.431	+ 0.0025	- 0.001
1689	4.5	4	31 Draconis, ψ^1 (1st st.)	17 44 26.22	58.5	8	- 1.087	+ 0.0154	- 0.002
1690	6.1	6	Draconis, ψ^1 (2nd st.)	17 44 27.89	57.5	7	- 1.089	+ 0.0154	.....
1691	6.6	2.5	*	17 45 34.88	61.5	3	+ 2.300	+ 0.0025	.....
1692	5.3	6	30 Draconis	17 45 43.52	57.4	5	1.435	+ 0.0036	- 0.008
1693	6.7	6.5	63 Ophiuchi	17 46 17.21	57.3	5	+ 3.690	+ 0.0036	.....
1694	9.3	12.5	Radcliffe 3796	17 46 44.79	56.9	14	-22.112	+ 0.5151	.....
1695	8.2	14	Radcliffe 3798	17 47 17.74	57.2	16	-22.155	+ 0.4949	.....
1696	7.7	1.5	Lacaille 7506	17 47 40.22	60.5	3	+ 3.744	+ 0.0035	.....
1697	6.9	7.5	Piazzi xvii. 279.....	17 47 55.78	57.8	4	3.609	+ 0.0032	.....
1698	6.3	4.5	Piazzi xvii. 281.....	17 48 15.92	57.3	5	3.449	+ 0.0030	.....
1699	5.7	1	89 Herculis	17 49 46.28	61.5	3	2.418	+ 0.0024	+ 0.001
1700	7.3	1	Piazzi xvii. 300 (S. st.)	17 50 16.12	61.6	1	2.629	+ 0.0021	.....
1701	7.5	1	Piazzi xvii. 300 (N. st.)	17 50 16.20	61.6	1	2.629	+ 0.0021	.....
1702	3.3*	...	32 Draconis, ξ	17 51 6.53	56.4	5	1.023	+ 0.0039	+ 0.014
1703	5.1	1	4 Sagittarii	17 51 14.72	56.5	5	3.661	+ 0.0028	- 0.005
1704	7.0	5	5 Sagittarii	17 51 36.69	57.4	5	3.674	+ 0.0028	.....
1705	4.0	1	92 Herculis, ξ	17 52 19.40	57.4	5	2.323	+ 0.0024	.....
1706	5.0*	...	57 Serpentis, ζ	17 53 5.28	57.1	4	3.158	+ 0.0023	- 0.008
1707	2.7*	...	33 Draconis, γ	17 53 21.35	59.9	20	1.391	+ 0.0031	0.000
1708	...	...	67 Ophiuchi	17 53 38.05	61.6	2	3.003	+ 0.0023	0.000
1709	5.3	1	95 Herculis (1st star).	17 55 33.73	61.6	1	2.542	+ 0.0022	.....
1710	5.3	1	95 Herculis (2nd star)	17 55 34.00	61.6	1	+ 2.542	+ 0.0022	.....
1711	5.0*	...	35 Draconis	17 55 43.05	56.4	5	- 2.709	+ 0.0113	+ 0.014
1712	8.2	6	Redhill 2693.....	17 55 57.91	58.6	5	-10.273	+ 0.0476	.....
1713	7.2	1.5	Lacaille 7554	17 56 8.61	57.6	2	+ 3.713	+ 0.0022	.....
1714	3.3*	...	10 Sagittarii, γ	17 56 48.98	55.8	5	+ 3.857	+ 0.0021	- 0.004
1715	9.0	5	Redhill 2698.....	17 57 27.54	58.6	3	-10.349	+ 0.0349	

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° ' "	1800+		"	"	"			
65 36 31.1	57.3	4	+ 1.95	- 0.359		2235	218	84 Herculis
21 10 40.3	58.4	2	1.94	+ 0.052	- 0.31	2238	241	28 Draconis, ω
117 46 23.4	56.9	3	1.86	- 0.549	.....	2230	217	3 Sagittarii
84 14	...	...	1.83	0.427	.....	...	226	Piazz. xvii. 226
84 10 6.6	60.5	3	1.76	0.428	.....	...	...	Lalande 32461
62 11 41.1	57.9	10	1.66	0.345	+ 0.74	2237	244	86 Herculis, μ
70 41 49.3	56.9	7	1.51	0.380	.....	...	255	Piazz. xvii. 255
64 19 39.8	57.4	6	1.48	- 0.354	- 0.04	2239	259	87 Herculis
17 47 1.1	55.2	11	1.36	+ 0.158	+ 0.27	2251	286	31 Draconis, ψ^1 (1st st.)
17 46 31.5	56.5	6	1.36	+ 0.158	.....	2252	287	Draconis, ψ^1 (2nd st.)
59 57 48.6	61.6	1	1.26	- 0.336	.....	...	...	*
39 11 2.9	57.9	6	1.25	0.210	- 0.19	2243	278	30 Draconis
114 51 18.4	57.3	4	1.20	- 0.538	.....	2241	267	63 Ophiuchi
3 2 2.5	56.1	2	1.16	+ 3.219	.....	...	...	Radcliffe 3796
3 1 43.4	57.1	4	1.11	+ 3.226	.....	...	...	Radcliffe 3798
116 44 34.1	58.0	2	1.08	- 0.546	.....	...	...	Lacaille 7506
111 55 39.3	59.0	4	1.06	0.526	.....	...	279	Piazz. xvii. 279
105 47 3.0	58.2	3	1.03	0.503	.....	...	281	Piazz. xvii. 281
63 55 25.6	61.6	1	0.90	0.353	- 0.02	2249	298	89 Herculis
71 39	...	...	0.85	0.383	.....	...	300	Piazz. xvii. 300 (S. st.)
71 39	...	...	0.85	0.383	.....	...	...	Piazz. xvii. 300 (N. st.)
33 6 15.9	55.3	5	0.78	0.150	- 0.07	2263	316	32 Draconis, ξ
113 47 57.1	57.2	3	0.77	0.534	+ 0.04	2246	299	4 Sagittarii
114 16 8.7	58.6	2	0.74	0.536	.....	2247	302	5 Sagittarii
60 44 3.1	57.0	2	0.67	0.339	+ 0.03	2258	314	92 Herculis, ξ
93 40 38.4	58.8	4	0.61	0.461	+ 0.05	2254	313	57 Serpentis, ζ
38 29 35.2	59.2	6	0.58	0.203	+ 0.04	2267	335	33 Draconis, γ
87 3 31.0	61.7	1	0.56	0.438	+ 0.03	2259	322	67 Ophiuchi
68 24	...	...	0.39	0.371	.....	2268	344	95 Herculis (1st star)
68 24	...	...	0.39	- 0.371	.....	2268	344	95 Herculis (2nd star)
13 1 18.1	55.4	8	0.38	+ 0.395	- 0.24	2287	380	35 Draconis
5 43 14.1	61.5	2	0.35	+ 1.498	.....	...	...	Redhill 2693
115 36 23.3	57.6	1	0.34	- 0.541	.....	...	...	Lacaille 7554
120 25 19.8	56.6	3	0.28	- 0.563	+ 0.23	2266	343	10 Sagittarii, γ
5 41 18.7	61.5	2	+ 0.23	+ 1.509	.....	...	...	Redhill 2698

1699. μ Herculis. The N.P.D., depending on one observation, is about 5" too small.

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				h. m. s.	1800+		s.	s.	s.
1716	5.6	3	34 Draconis, ψ^2	17 57 36.77	57.5	2	- 1.048	+ 0.0053	+ 0.001
1717	4.6	1	70 Ophiuchi (1st star)	17 58 22.81	58.7	8	+ 3.013	+ 0.0020	+ 0.015
1718	6.6	5.5	70 Ophiuchi (2nd star)	17 58 23.20	58.0	7	3.013	+ 0.0020	.....
1719	6.4	5	Piazzi xvii. 357.....	17 58 29.77	57.9	8	3.267	+ 0.0017	.....
1720	8.3	1	Piazzi xvii. 362 (1st st.)	17 59 12.58	61.6	1	2.788	+ 0.0020	.....
1721	7.5	1	Piazzi xvii. 362 (2nd st.)	17 59 13.01	61.6	1	2.788	+ 0.0020	.....
1722	7.0	2	Lacaille 7587	18 0 16	...	...	3.709	+ 0.0016	.....
1723	7.5	2	Piazzi xvii. 365.....	18 0 33.47	57.0	5	3.931	+ 0.0015	.....
1724	4.3	1	72 Ophiuchi	18 0 42.70	61.5	8	2.847	+ 0.0020	- 0.005
1725	6.5	6	100 Herculis (S. star).	18 2 10.92	55.5	5	2.417	+ 0.0021	.....
1726	6.9	3.5	100 Herculis (N. star)	18 2 10.96	55.3	5	2.417	+ 0.0021	.....
1727	...	...	73 Ophiuchi	18 2 36.70	61.6	1	2.979	+ 0.0018	.....
1728	7.0	6	12 Sagittarii	18 4 32.43	58.5	3	3.643	+ 0.0013	.....
1729	4.1	1	13 Sagittarii, μ	18 5 23.49	58.6	24	3.587	+ 0.0011	- 0.004
1730	7.3	6	Groombridge 2528 ...	18 7 32.57	58.6	3	1.073	+ 0.0019	.....
1731	6.3	5	Groombridge 2527 ...	18 7 39.24	59.3	4	1.216	+ 0.0018	.....
1732	...	...	Oelt.Arg.(s.z.)17995-8	18 9 37	...	...	3.713	+ 0.0003	.....
1733	6.3	1	Lacaille 7660	18 10 3	...	...	3.713	+ 0.0002	.....
1734	7.2	4	Lalande 33642 (1st st.)	18 10 29.97	59.2	7	+ 3.523	+ 0.0006	.....
1735	5.6	2	40 Draconis	18 10 30.18	58.2	3	- 4.485	- 0.0258	+ 0.022
1736	8.2	3	Lalande 33642 (2nd st.)	18 10 31.04	58.6	2	+ 3.523	+ 0.0006	.....
1737	5.5	4	41 Draconis	18 10 36.50	58.2	3	- 4.487	- 0.0262	+ 0.018
1738	3.3*	...	19 Sagittarii, δ	18 12 1.97	56.7	5	+ 3.839	- 0.0005	- 0.001
1739	5.3	2	B.A.C. 6213	18 12 23.47	57.5	2	2.902	+ 0.0014	.....
1740	6.4	2	Groombridge 2538 ...	18 12 40.28	60.0	4	1.916	+ 0.0020	.....
1741	5.2	1	36 Draconis	18 13 5.28	56.6	4	0.292	- 0.0005	+ 0.052
1742	3.0*	...	58 Serpentis, η	18 14 3.94	57.8	10	+ 3.140	+ 0.0010	- 0.039
1743	8.2	4	Radcliffe 3900	18 14 20.57	54.1	3	-10.523	- 0.1417	.....
1744	2.7*	...	20 Sagittarii, ϵ	18 14 52.96	57.4	5	+ 3.987	- 0.0013	- 0.004
1745	6.1	7.5	108 Herculis.....	18 15 33.54	57.4	5	2.308	+ 0.0019	.....
1746	5.4	5	B.A.C. 6245	18 16 37.88	58.0	2	+ 2.645	+ 0.0017	.....
1747	7.8	14	Radcliffe 3921	18 16 53.89	56.5	12	-14.541	- 0.2998	.....
1748	4.3*	...	23 Ursæ Minoris, δ ...	18 17 30.60	55.3	4	-19.380	- 0.5119	+ 0.048
1749	4.2	1	109 Herculis.....	18 17 43.84	57.4	7	+ 2.541	+ 0.0017	.....
1750	6.5	1	38 Draconis	18 17 48.06	58.5	1	- 0.345	- 0.0049	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazz.	Name of Star.
° ' "	1800+		"	"	"			
17 58 58.8	58.5	1	+ 0.21	+ 0.153	+ 0.28	2285	382	34 Draconis, ψ^2
87 27 50.1	59.6	6	0.14	- 0.440	+ 0.12	2271	358	70 Ophiuchi (1st star)
87 27 52.6	58.2	6	0.14	0.440	.....	...	...	70 Ophiuchi (2nd star)
98 19 53.2	58.3	4	0.13	0.477	.....	...	357	Piazz xvii. 357
78 0 17.6	61.7	1	0.07	0.407	.....	...	362	Piazz xvii. 362 (1st st.)
78 0 15.2	61.7	1	+ 0.07	0.407	.....	...	...	Piazz xvii. 362 (2nd st.)
115 29 17.7	58.2	3	- 0.02	0.541	.....	...	...	Lacaille 7587
116 7 14.2	56.9	4	0.04	0.543	.....	...	365	Piazz xvii. 365
80 27 8.9	61.5	2	0.06	0.415	- 0.06	2275	374	72 Ophiuchi
63 55 14.8	56.2	5	0.19	0.352	.....	2279	389	100 Herculis (S. star)
63 55 0.6	56.6	3	0.19	0.352	.....	2280	390	100 Herculis (N. star)
86 1 36.6	61.7	1	0.23	0.434	.....	2277	387	73 Ophiuchi
113 8 50.1	59.3	4	0.35	0.531	.....	...	...	12 Sagittarii
111 5 29.7	57.1	9	0.47	0.523	+ 0.01	2284	7	13 Sagittarii, μ
33 45 50.8	58.6	4	0.66	0.156	.....	...	...	Groombridge 2528
35 45 15.9	58.6	4	0.67	0.177	.....	...	...	Groombridge 2527
108 50 42.5	61.5	1	0.84	0.541	.....	...	...	Oelt.Arg.(s.z.)17995-8
115 39 8.2	58.1	2	0.88	0.541	.....	...	...	Lacaille 7660
108 40 11.7	60.2	3	0.92	- 0.513	.....	...	...	Lalande 33642 (1st st.)
10 1 20.5	59.1	2	0.92	+ 0.654	- 0.09	2318	62	40 Draconis
108 40 0.5	60.2	3	0.92	- 0.513	.....	...	...	Lalande 33642 (2nd st.)
10 1 9.9	58.6	2	0.92	+ 0.654	.....	2321	63	41 Draconis
119 53 1.5	59.8	4	1.05	- 0.559	+ 0.04	2294	32	19 Sagittarii, δ
82 47 38.0	57.6	3	1.08	0.423	.....	...	...	B.A.C. 6113
49 6 58.6	60.7	3	1.11	0.279	.....	...	...	Groombridge 2538
25 38 59.7	55.9	5	1.14	0.042	- 0.01	2309	54	36 Draconis
92 55 54.0	55.6	5	1.23	- 0.457	+ 0.68	2298	48	58 Serpentis, η
5 36 20.6	56.9	4	1.25	+ 1.533	.....	...	...	Radcliffe 3900
124 27	...	...	1.30	- 0.580	+ 0.14	2297	46	20 Sagittarii, ϵ
60 12 19.1	56.2	5	1.36	0.336	.....	2307	57	108 Herculis
72 14 29.2	58.2	3	1.45	- 0.385	.....	...	...	B.A.C. 6245
4 19 46.0	57.9	3	1.49	+ 2.116	.....	...	...	Radcliffe 3921
3 23 52.6	57.8	17	1.53	+ 2.818	- 0.03	2395	178	23 Ursæ Minoris, δ
68 17 26.5	57.6	3	1.55	- 0.369	.....	2311	64	109 Herculis
21 18 52.0	61.7	2	- 1.56	+ 0.051	.....	2322	80	38 Draconis

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
1751	3.0*	...	22 Sagittarii, λ	18 19 19.84	56.8	5	+ 3.707	— 0.0012	— 0.005
1752	9.0	1	Serpentis, d^1	18 20 3	...	...	3.069	+ 0.0008	.....
1753	5.5	1	59 Serpentis, d^2	18 20 3	...	...	+ 3.069	+ 0.0008	— 0.001
1754	8.1	3.5	Radcliffe 3989	18 20 56.42	55.3	5	— 40.333	— 2.4031	.....
1755	6.7	5	Bradley 2331	18 21 16.57	57.9	3	0.895	— 0.0106	.....
1756	8.2	3	Radcliffe 3969	18 21 59.42	56.3	5	26.298	— 1.1300	.....
1757	6.1	12	24 Ursæ Minoris	18 22 36.05	59.5	14	— 22.148	— 0.8454	+ 0.085
1758	6.7	8	Piazzi xviii. 88	18 23 6.36	57.9	13	+ 3.530	— 0.0010	.....
1759	4.1	2	44 Draconis, χ	18 23 34.58	56.0	5	— 1.191	— 0.0150	+ 0.116
1760	...	...	Piazzi xviii. 94	18 23 38.53	59.5	1	+ 3.536	— 0.0010	.....
1761	7.1	4	Bradley 2319	18 24 40.96	57.0	4	3.670	— 0.0017	.....
1762	5.6	2	42 Draconis	18 25 34.76	58.6	1	0.160	— 0.0047	+ 0.014
1763	6.8	6	25 Sagittarii.....	18 25 58.92	57.1	4	3.672	— 0.0020	+ 0.008
1764	5.2	6	1 Aquilæ	18 27 35.29	57.7	12	3.266	— 0.0003	— 0.004
1765	6.4	4.5	Bradley 2332	18 29 31.51	58.6	4	3.595	— 0.0019	— 0.004
1766	8.3	1	Lacaille 7804	18 29 37.09	57.6	2	+ 3.705	— 0.0026	.....
1767	8.2	6.5	Radcliffe 4073	18 29 42.25	54.7	5	— 56.482	— 6.5172	.....
1768	6.2	7	Bradley 2335	18 30 32.63	57.8	5	+ 3.585	— 0.0020	— 0.002
1769	7.1	12	Bradley 2339	18 30 40.35	56.1	10	2.007	+ 0.0017	— 0.001
1770	7.9	13	*	18 32 5.31	56.0	10	2.023	+ 0.0017	.....
1771	1.0*	...	3 Lyræ, α	18 32 11.89	57.3	14	2.013	+ 0.0017	+ 0.017
1772	7.5	2	Piazzi xviii. 151 (N. st.)	18 33 29	...	...	2.113	+ 0.0018	.....
1773	9.5	1	Piazzi xviii. 151 (S. st.)	18 33 29	...	...	2.113	+ 0.0018	.....
1774	...	...	2 Aquilæ	18 34 36.50	61.6	1	3.286	— 0.0010	— 0.001
1775	7.5	6.5	Bradley 2348	18 35 47.16	57.0	5	1.177	— 0.0008	.....
1776	5.8	6	Piazzi xviii. 155	18 36 13.09	56.2	5	3.692	— 0.0034	.....
1777	3.8	1	27 Sagittarii, ϕ	18 36 54.44	56.6	6	3.748	— 0.0040	+ 0.004
1778	7.0	4	Lacaille 7849	18 37 17.34	57.6	4	+ 3.762	— 0.0040	.....
1779	7.7	9	Radcliffe 4069	18 38 38.10	57.1	9	— 18.486	— 1.0619	.....
1780	7.0	1	5 Aquilæ (1st star) ...	18 39 15.11	61.6	1	+ 3.097	— 0.0004	.....
1781	...	...	5 Aquilæ (2nd star) ...	18 39 16	...	...	3.097	— 0.0004	.....
1782	7.3	5.5	Bradley 2347	18 39 33.96	58.3	5	3.563	— 0.0030	.....
1783	4.4	1	110 Herculis.....	18 39 38.20	57.2	5	2.582	+ 0.0012	.....
1784	5.0	2	4 Lyræ, ϵ^1 (1st star)...	18 39 41.86	58.1	5	1.985	+ 0.0014	— 0.002
1785	6.4	2	Lyræ, ϵ^1 (2nd star) .	18 39 42.04	58.1	5	+ 1.985	+ 0.0014	— 0.002

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
115 29 40.5	59.1	10	— 1.69	— 0.538	+ 0.24	2310	66	22 Sagittarii, λ
89 52 57.3	61.6	2	1.75	0.446	.....	.....	...	Serpentis, d^1
89 53 1.5	61.6	2	1.75	— 0.446	0.00	2312	74	59 Serpentis, d^2
1 45 24.5	56.3	4	1.83	+ 5.846	.....	...	...	Radcliffe 3989
18 33 9.8	57.9	3	1.86	0.130	.....	2331	...	Bradley 2331
2 35 39.9	56.6	3	1.92	3.819	.....	...	...	Radcliffe 3969
3 1 15.2	59.3	10	1.97	+ 3.215	— 0.01	2417	227	24 Ursæ Minoris
108 59 38.2	56.2	5	2.02	— 0.511	.....	...	88	Piazzi xviii. 88
17 19 46.0	57.4	5	2.06	+ 0.174	+ 0.38	2337	119	44 Draconis, χ
109 13	...	...	2.06	— 0.512	.....	...	94	Piazzi xviii. 94
114 12 27.8	56.3	4	2.15	0.531	.....	2319	99	Bradley 2319
24 31 24.0	57.9	3	2.23	0.022	+ 0.06	2336	124	42 Draconis
114 19 31.3	59.1	4	2.27	0.531	— 0.02	2326	108	25 Sagittarii
98 20 18.7	58.0	7	2.41	0.472	+ 0.33	2330	115	1 Aquilæ
111 30 36.2	58.3	4	2.57	0.519	.....	2332	125	Bradley 2332
115 32 11.9	59.6	2	2.58	— 0.535	.....	...	...	Lacaille 7804
1 16 31.2	56.2	5	2.59	+ 8.170	.....	...	...	Radcliffe 4073
111 9 49.8	56.0	5	2.66	— 0.517	.....	2335	131	Bradley 2335
51 13 1.6	56.1	5	2.68	0.289	.....	2339	137	Bradley 2339
51 35 46.1	55.7	6	2.80	0.291	.....	...	...	*
51 20 39.6	58.3	14	2.81	0.290	— 0.28	2341	143	3 Lyræ, α
54 3 59.4	61.6	2	2.92	0.304	.....	...	151	Piazzi xviii. 151 (N. st.)
54 4 5.0	61.6	1	2.92	0.304	.....	...	...	Piazzi xviii. 151 (S. st.)
99 10 58.6	61.7	1	3.02	0.473	+ 0.01	2342	149	2 Aquilæ
34 52 59.3	57.5	8	3.12	0.169	.....	2348	...	Bradley 2348
115 8 50.5	57.3	7	3.15	0.531	.....	...	155	Piazzi xviii. 155
117 7 51.4	56.3	7	3.22	0.539	— 0.01	2344	159	27 Sagittarii, φ
117 38 29.9	58.3	4	3.24	— 0.541	.....	...	...	Lacaille 7849
3 29 56.7	55.7	2	3.37	+ 2.659	.....	...	...	Radcliffe 4069
91 6 22.2	61.7	1	3.42	— 0.444	.....	2349	176	5 Aquilæ (1st star)
91 6 28.2	61.7	1	3.42	0.444	.....	...	...	5 Aquilæ (2nd star)
110 25 20.3	57.8	4	3.44	0.510	.....	2347	175	Bradley 2347
69 35 4.5	56.6	6	3.45	0.369	.....	2351	181	110 Herculis
50 28 27.3	59.7	2	3.46	0.284	— 0.04	2355	183	4 Lyræ, ε ¹ (1st star)
50 28 22.9	59.6	2	— 3.46	— 0.284	— 0.04	...	...	Lyræ, ε ¹ (2nd star)

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				h.	m.	s.					
1786	5.1	2	5 Lyræ, ϵ^2 (1st star)...	18	39	44.20	58.2	5	+ 1.988	+ 0.0014	— 0.002
1787	5.1	1	5 Lyræ, ϵ^2 (2nd star) .	18	39	44.54	58.2	5	1.988	+ 0.0014	— 0.002
1788	4.0	1	6 Lyræ, ζ^1	18	39	57.10	61.4	4	2.063	+ 0.0015	+ 0.002
1789	6.2	2	7 Lyræ, ζ^2	18	39	59.13	61.4	4	2.063	+ 0.0015	+ 0.001
1790	6.0	2	Scuti (R) var.	18	40	0.62	56.9	3	3.207	— 0.0010	.....
1791	4.8	1	III Herculis.....	18	40	50.29	57.1	4	2.643	+ 0.0011	.....
1792	7.7	4	Lacaille 7875	18	40	52.36	57.9	4	3.751	— 0.0045	.....
1793	7.2	2.5	Lacaille 7887	18	41	44.09	57.5	2	3.631	— 0.0038	.....
1794	7.5	3	Lacaille 7893	18	42	41.93	57.6	3	3.751	— 0.0048	.....
1795	6.0	2	8 Lyræ, ν^1	18	44	33.24	58.6	2	2.231	+ 0.0016	.....
1796	6.2	2	9 Lyræ, ν^2	18	44	39.17	58.6	2	2.240	+ 0.0016	.....
1797	Var.	...	10 Lyræ, β^1	18	44	54.61	59.2	26	2.214	+ 0.0015	— 0.002
1798	7.4	12	Lyræ, β^2	18	44	56.54	58.1	11	2.214	+ 0.0015	.....
1799	5.2	4	32 Sagittarii, ν^1	18	45	42.96	58.4	7	3.626	— 0.0042	— 0.004
1800	2.6	1	34 Sagittarii, σ	18	46	34.96	56.7	5	3.724	— 0.0052	0.000
1801	6.1	5.5	Oelt. Arg.(s.z.)18841-2	18	47	27.09	59.2	8	3.461	— 0.0032	.....
1802	4.9	3	63 Serpentis, θ^1	18	49	15.43	61.6	2	2.980	— 0.0004	— 0.003
1803	5.0	6	63 Serpentis, θ^2	18	49	17.09	59.6	4	2.980	— 0.0004	— 0.004
1804	5.5	1	9 Aquilæ	18	49	34.01	57.6	2	+ 3.210	— 0.0016	+ 0.006
1805	5.6	7	50 Draconis	18	50	52.11	57.0	5	— 1.887	— 0.0545	— 0.016
1806	4.5	8	13 Lyræ	18	51	4.38	58.6	5	+ 1.823	+ 0.0008	— 0.001
1807	5.8	5	Bradley 2388	18	51	46.67	57.8	7	2.234	+ 0.0014	.....
1808	4.2	4	13 Aquilæ, ϵ	18	53	16.06	59.3	14	2.726	+ 0.0006	— 0.008
1809	3.3*	...	38 Sagittarii, ζ	18	53	42.16	56.8	5	3.825	— 0.0073	— 0.005
1810	...	...	14 Lyræ, γ	18	53	42.30	58.6	2	2.243	+ 0.0014	— 0.002
1811	6.3	4.5	Piazzi xviii. 261	18	53	53.44	56.6	3	+ 3.679	— 0.0059	.....
1812	9.1	8	Redhill 2859.....	18	54	23.43	58.6	7	— 10.388	— 0.5589	.....
1813	...	...	Groombridge 2738 ...	18	55	10.35	60.6	1	+ 0.991	— 0.0042	.....
1814	8.5	3	Piazzi xviii. 274	18	55	32.34	61.6	1	3.093	— 0.0012	.....
1815	8.8	3	Piazzi xviii. 275	18	55	33.29	61.6	1	3.093	— 0.0012	.....
1816	7.5	3.5	Lacaille 7987	18	56	10.03	58.6	2	3.689	— 0.0062	.....
1817	5.4	5	16 Lyræ	18	57	28.55	57.8	5	1.696	+ 0.0002	.....
1818	7.1	2	Aquilæ, h^1	18	57	33	...	...	3.168	— 0.0018	.....
1819	5.6	2	15 Aquilæ, h^2	18	57	34.23	61.6	1	3.168	— 0.0018	— 0.001
1820	3.8	1	40 Sagittarii, τ	18	58	11.80	57.0	5	+ 3.756	— 0.0073	— 0.008

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° ' "	1800+		"	"	"			
50 31 53.3	58.5	1	— 3.46	— 0.284	— 0.09	2356	184	5 Lyræ, ϵ^2 (1st star)
50 32	...	...	3.46	0.284	— 0.09	2356	184	5 Lyræ, ϵ^2 (2nd star)
52 32 20.1	60.7	1	3.48	0.295	— 0.02	2357	187	6 Lyræ, ζ^1
52 33 0.4	58.6	1	3.48	0.295	— 0.02	2358	189	7 Lyræ, ζ^2
95 51 11.1	60.7	1	3.49	0.460	.....	...	...	Scuti (R) var.
71 58 19.0	55.4	5	3.56	0.378	.....	2354	192	111 Herculis
117 16 41.7	60.1	2	3.56	0.537	.....	...	...	Lacaille 7875
113 0 10.8	61.6	1	3.63	0.519	.....	...	...	Lacaille 7887
117 19 23.8	58.1	2	3.72	0.536	.....	...	...	Lacaille 7893
57 20 45.8	57.7	1	3.87	0.317	.....	2367	213	8 Lyræ, ν^1
57 36 28.7	57.6	2	3.88	0.318	.....	2368	214	9 Lyræ, ν^2
56 47 50.4	57.4	4	3.91	0.315	+ 0.03	2369	215	10 Lyræ, β^1
56 48 30.7	58.6	4	3.91	0.315	.....	...	...	Lyræ, β^2
112 54 49.0	58.6	1	3.97	0.517	+ 0.01	2364	211	32 Sagittarii, ν^1
116 28 0.1	56.1	6	4.05	0.530	+ 0.08	2365	218	34 Sagittarii, σ
106 32 36.5	58.1	2	4.13	0.493	.....	...	...	Oelt.Arg.(s.z.)18841-2
85 58 30.8	60.9	4	4.28	0.423	— 0.08	2376	236	63 Serpentis, θ^1
85 58 36.5	60.2	5	4.28	0.423	— 0.09	2377	...	63 Serpentis, θ^2
96 2	...	...	4.30	— 0.455	+ 0.04	2375	240	9 Aquilæ
14 44 0.9	56.4	10	4.42	+ 0.270	— 0.07	2404	279	50 Draconis
46 14 12.1	58.8	4	4.43	— 0.257	.....	2389	252	13 Lyræ
57 16 32.4	56.4	4	4.49	0.316	.....	2388	...	Bradley 2388
75 7 8.1	58.4	7	4.62	0.385	+ 0.10	2390	262	13 Aquilæ, ϵ
120 4 33.7	57.6	5	4.66	0.541	+ 0.03	2384	257	38 Sagittarii, ζ
57 30 0.9	58.1	2	4.66	0.316	0.00	2392	266	14 Lyræ, γ
115 2 9.1	57.6	4	4.67	— 0.520	.....	...	261	Piazzi xviii. 261
5 30 52.9	58.0	4	4.71	+ 1.475	.....	...	...	Redhill 2859
31 58	...	...	4.78	— 0.138	.....	...	287	Groombridge 2738
90 54 17.8	61.6	2	4.82	0.436	.....	...	274	Piazzi xviii. 274
90 54 35.6	61.6	2	4.82	0.436	.....	...	275	Piazzi xviii. 275
115 26 0.7	58.5	2	4.87	0.520	.....	...	...	Lacaille 7987
43 15 43.5	58.1	5	4.98	0.238	.....	...	299	16 Lyræ
94 14 41.2	61.6	2	4.99	0.446	.....	2398	...	Aquilæ, h^1
94 14 8.2	61.6	2	4.99	0.446	0.00	2399	289	15 Aquilæ, h^2
117 52 15.8	56.0	5	— 5.04	— 0.528	+ 0.26	2397	292	40 Sagittarii, τ

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				h. m. s.	1800+		s.	s.	s.
1821	...	...	16 Aquilæ, λ	18 58 49.11	59.6	3	+ 3.187	— 0.0021	— 0.003
1822	7.5	2.5	Piazzixviii. 302 (1st st.)	18 58 58.25	61.6	1	2.928	— 0.0005	
1823	9.4	2	Piazzixviii. 302 (2nd st.)	18 58 58	...	...	2.928	— 0.0005	.....
1824	3.0*	...	17 Aquilæ, ζ	18 58 58.43	59.1	22	2.758	+ 0.0003	— 0.006
1825	Var.	...	Aquilæ (R) ..	18 59 37.63	57.5	5	+ 2.890	— 0.0004	.....
1826	6.7	11	Radcliffe 4208	19 0 5.29	57.5	12	— 18.210	— 1.6335	.....
1827	6.5	9	Bradley 2409	19 0 48.14	57.8	6	+ 2.497	+ 0.0011	.....
1828	5.9	5	Piazzixviii. 318	19 1 4.32	57.0	5	2.374	+ 0.0013	.....
1829	6.1	4	17 Lyræ	19 2 7.81	56.2	5	2.258	+ 0.0012	.....
1830	7.4	3	Piazzixix. 8	19 3 2.12	61.6	3	+ 2.041	+ 0.0011	.....
1831	6.6	4	Bradley 2440	19 3 47.65	58.4	4	— 2.430	— 0.0901	— 0.015
1832	6.2	4.5	Piazzixix. 7	19 4 36.29	57.4	5	+ 3.702	— 0.0076	.....
1833	7.5	1	Lacaille 8039	19 5 15.55	60.9	4	3.728	— 0.0080	.....
1834	7.6	8.5	Bradley 2420	19 5 24.52	56.9	4	2.288	+ 0.0012	.....
1835	5.7	2	42 Sagittarii, ψ	19 6 57.23	58.6	6	3.683	— 0.0077	0.000
1836	5.0	1	20 Lyræ, η^1	19 8 59.38	61.6	1	2.041	+ 0.0010	0.000
1837	9.3	2	Lyræ, η^2	19 9 0	...	...	2.041	+ 0.0010	.....
1838	7.2	4	W.B. (2) XIX. 265 ...	19 9 19.96	59.9	5	2.628	+ 0.0006	.....
1839	5.2	4	43 Sagittarii, d	19 9 26.67	59.8	6	3.516	— 0.0060	— 0.004
1840	6.4	6.5	Piazzixix. 50	19 11 1.04	57.3	7	3.432	— 0.0052	.....
1841	5.8	9.5	25 Aquilæ, ω	19 11 14.65	59.2	18	2.817	— 0.0003	— 0.003
1842	6.4	9	24 Aquilæ.....	19 11 41.21	57.0	5	3.070	— 0.0019	.....
1843	3.0*	...	57 Draconis, δ	19 12 30.79	56.6	5	0.017	— 0.0227	+ 0.020
1844	5.5	6	26 Aquilæ, f	19 13 4.35	57.8	4	3.198	— 0.0030	.....
1845	...	...	44 Sagittarii, ρ^1	19 13 32.95	61.6	2	3.487	— 0.0061	— 0.003
1846	...	...	45 Sagittarii, ρ^2	19 13 40.83	59.6	3	+ 3.498	— 0.0062	+ 0.007
1847	5.5	4	59 Draconis	19 14 15.95	57.2	4	— 2.137	— 0.0934	+ 0.009
1848	5.7	4	47 Sagittarii, χ^1	19 16 45.12	56.4	5	+ 3.655	— 0.0086	— 0.001
1849	4.9	1	60 Draconis, τ ..	19 18 13.22	57.0	5	— 1.073	— 0.0563	— 0.033
1850	5.4	7	31 Aquilæ, b	19 18 17.58	57.9	8	+ 2.812	— 0.0004	+ 0.049
1851	3.3*	...	30 Aquilæ, δ	19 18 26.30	59.7	27	3.010	— 0.0017	+ 0.014
1852	6.7	7	Bradley 2457	19 19 16.19	57.3	5	2.614	+ 0.0005	.....
1853	6.6	5.5	Bradley 2459	19 19 38.21	57.1	5	2.495	+ 0.0009	.....
1854	6.2	3.5	Piazzixix. 126	19 21 12.42	59.9	5	3.718	— 0.0102	
1855	8.5	4.5	Piazzixix. 149 (1st st.)	19 22 39.08	61.6	2	+ 2.155	+ 0.0012	

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° ' "	1800+		"	"	"			
95 5 24.0	58.6	1	— 5.09	— 0.448	+ 0.07	2401	298	16 Aquilæ, λ
83 39 35.0	61.7	2	5.10	0.411		...	302	Piazzi xviii. 302 (1st st.)
83 39 44.2	61.7	2	5.10	0.411	.....	...	...	Piazzi xviii. 302 (2nd st.)
76 20 31.0	57.3	6	5.10	0.387	+ 0.07	2405	303	17 Aquilæ, ζ
81 58 45.8	57.6	4	5.16	— 0.405	.....	...	...	Aquilæ (R)
3 28 20.2	56.5	4	5.20	+ 2.567	.....	...	...	Radcliffe 4208
65 57 49.1	55.9	5	5.26	— 0.349	— 0.01	2409	...	Bradley 2409
61 35 20.5	57.6	7	5.28	0.331	.....	...	318	Piazzi xviii. 318
57 42 58.2	56.4	5	5.37	0.314	.....	2413	327	17 Lyræ
51 17 27.4	61.7	2	5.45	— 0.284	.....	...	8	Piazzi xix. 8
13 9 7.4	58.7	1	5.51	+ 0.342	.....	2440	38	Bradley 2440
116 8 14.9	56.3	5	5.58	— 0.516	.....	...	7	Piazzi xix. 7
117 6	...	...	5.63	0.519	.....	...	...	Lacaille 8039
58 35 30.4	55.9	6	5.65	0.317	.....	2420	...	Bradley 2420
115 29 38.1	59.1	9	5.78	0.512	+ 0.01	2418	21	42 Sagittarii, ψ
51 5 33.5	61.7	2	5.95	0.282	— 0.02	2427	45	20 Lyræ, η ¹
51 5 30.2	61.7	2	5.95	0.282	.....	...	...	Lyræ, η ²
70 49 19.0	59.6	4	5.98	0.363	.....	...	...	W.B. (2) XIX. 265
109 11 57.1	59.1	4	5.99	0.487	— 0.01	2423	35	43 Sagittarii, d
105 46 36.2	55.6	6	6.12	0.474	.....	...	50	Piazzi xix. 50
78 39 14.5	56.6	7	6.14	0.389	— 0.02	2432	57	25 Aquilæ, ω
89 54 47.3	56.4	8	6.17	0.423	.....	2431	60	24 Aquilæ
22 35 6.0	56.6	7	6.24	0.000	— 0.07	2449	90	57 Draconis, δ
95 40 28.0	58.1	4	6.29	0.440	.....	2435	66	26 Aquilæ, f
108 6 25.0	61.7	2	6.33	0.480	— 0.03	2434	69	44 Sagittarii, ρ ¹
108 33 54.5	57.7	1	6.34	— 0.481	+ 0.05	2436	70	45 Sagittarii, ρ ²
13 40 29.9	56.4	6	6.38	+ 0.296	+ 0.14	2466	119	59 Draconis
114 46 35.6	57.7	9	6.59	— 0.501	+ 0.03	2445	93	47 Sagittarii, χ ¹
16 54 20.8	55.0	10	6.71	+ 0.150	— 0.10	2472	141	60 Draconis, τ
78 21 11.4	56.3	6	6.72	— 0.384	.....	2452	114	31 Aquilæ, b
87 9 40.2	58.6	8	6.73	0.411	— 0.10	2451	113	30 Aquilæ, δ
70 0 5.6	56.1	5	6.80	0.356	.....	2457	...	Bradley 2457
65 20 14.3	57.5	6	6.83	0.339	.....	2459	123	Bradley 2459
117 16 6.4	59.3	3	6.96	0.506	.....	...	126	Piazzi xix. 126
53 46 16.2	61.7	3	— 7.08	— 0.291	.....	...	149	Piazzi xix. 149 (1st st.)

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of R.A. Obs.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
1856	8.6	2.5	Piazzi xix. 149 (2nd st.)	19 22 39	...	...	+ 2.155	+ 0.0012	.....
1857	4.5	2	6 Vulpeculæ, α	19 22 52.78	59.4	8	2.505	+ 0.0009	- 0.011
1858	5.8	6	8 Vulpeculæ	19 23 6.47	56.0	5	2.503	+ 0.0009	.....
1859	7.3	4	Piazzi xix. 147	19 23 56.36	57.4	6	+ 3.571	- 0.0082	.....
1860	7.4	2	Radcliffe 4334	19 24 2.75	61.2	2	- 2.135	- 0.1087	.....
1861	3.3	1	6 Cygni, β^1	19 25 4.42	57.2	5	+ 2.419	+ 0.0009	- 0.002
1862	6.2	6	Cygni, β^2	19 25 6.72	57.2	5	2.419	+ 0.0009	.....
1863	4.5	1	10 Cygni, ι^2	19 26 10.41	57.8	5	1.512	- 0.0021	0.000
1864	4.4	2	38 Aquilæ, μ	19 27 15.03	57.9	10	2.918	- 0.0013	+ 0.013
1865	6.3	1	51 Sagittarii, h^1	19 27 31	...	...	3.651	- 0.0100	- 0.002
1866	4.8	0.5	52 Sagittarii, h^2	19 28 11.09	58.6	9	3.655	- 0.0101	+ 0.002
1867	6.6	9	Groombridge 2875 ...	19 28 48.57	59.3	7	1.067	- 0.0074	.....
1868	6.5	1	Piazzi xix. 186	19 29 9.73	61.6	2	3.300	- 0.0052	.....
1869	6.1	8	42 Aquilæ	19 30 21.53	58.3	6	3.179	- 0.0037	.....
1870	6.3	5	Piazzi xix. 211	19 30 42.28	56.4	5	1.552	- 0.0019	.....
1871	6.8	3	53 Sagittarii	19 31 24.73	59.1	5	3.614	- 0.0098	.....
1872	6.2	4	Bradley 2488	19 31 42.03	59.7	4	+ 3.613	- 0.0098	.....
1873	4.9	1	61 Draconis, σ	19 32 37.07	57.8	5	- 0.204	- 0.0368	.....
1874	4.7*	...	13 Cygni, θ	19 32 41.14	55.4	5	+ 1.612	- 0.0015	0.000
1875	...	...	54 Sagittarii, e^1 (1st st.)	19 32 42.11	61.6	2	3.438	- 0.0073	+ 0.001
1876	9.0	1.5	Sagittarii, e^1 (2nd st.)	19 32 42	...	...	3.438	- 0.0073	.....
1877	Var.	...	Cygni (R)	19 33 3.56	58.1	6	+ 1.614	- 0.0015	.....
1878	8.7	12	Radcliffe 4447	19 33 54.18	57.1	11	-26.263	- 5.1428	.....
1879	6.9	3.5	Piazzi xix. 233	19 34 3.46	57.5	5	+ 1.664	- 0.0010	.....
1880	...	...	Radcliffe 4406	19 34 24.42	60.7	1	1.345	- 0.0041	.....
1881	7.3	2	Oeltz. Arg. (N.Z.) 19475	19 34 24.88	61.7	2	1.342	- 0.0042	.....
1882	5.9	4	Piazzi xiv. 230	19 35 34.32	57.6	5	3.417	- 0.0073	.....
1883	7.2	5	Bradley 2502	19 36 5.18	57.3	4	2.672	+ 0.0002	.....
1884	6.1	3.5	16 Cygni, c^1	19 38 5.58	55.5	5	1.612	- 0.0016	- 0.022
1885	6.4	9	Cygni, c^2	19 38 8.33	57.4	4	1.612	- 0.0016	- 0.016
1886	5.4	2	56 Sagittarii, f	19 38 11.58	60.4	5	3.517	- 0.0091	- 0.013
1887	5.1	7	15 Cygni	19 39 13.66	57.8	5	2.157	+ 0.0012	+ 0.006
1888	3.0*	...	50 Aquilæ, γ	19 39 36.13	57.7	21	2.852	- 0.0010	+ 0.001
1889	7.0	3.5	Piazzi xix. 260	19 39 44.69	58.1	4	3.544	- 0.0096	.....
1890	7.5	2	Piazzi xix. 276	19 40 31	...	...	+ 2.201	+ 0.0012	.....

1880 and 1881. These stars are probably identical.

Mean N.P.D. 1860, Jan. 1.			Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
°	'	"	1800+		"	"	"			
53	46	5.4	61.7	3	— 7.08	— 0.291	.....	...	...	Piazzixix. 149 (2nd st.)
65	36	57.1	59.4	5	7.10	0.339	+ 0.09	2467	148	6 Vulpeculæ, α
65	31	2.8	56.5	8	7.11	0.338	.....	2470	150	8 Vulpeculæ
111	48	33.0	56.2	6	7.18	— 0.484	.....	...	147	Piazzixix. 147
13	29		...	...	7.19	+ 0.294	.....	...	...	Radcliffe 4334
62	19	54.2	57.9	8	7.27	— 0.326	0.00	2473	161	6 Cygni, β^1
62	19	35.4	58.6	10	7.27	0.326	.....	2474	162	Cygni, β^2
38	34	1.9	57.1	6	7.36	0.202	— 0.13	2481	175	10 Cygni, ι^2
82	54	55.6	57.3	10	7.45	0.392	+ 0.14	2479	171	38 Aquilæ, μ
115	1	21.5	58.0	3	7.48	0.492	0.00	2475	168	51 Sagittarii, h^1
115	11	19.7	56.2	8	7.53	0.492	— 0.02	2478	174	52 Sagittarii, h^2
31	41	49.2	58.4	5	7.58	0.141	.....	...	...	Groombridge 2875
100	27	55.1	61.7	2	7.62	0.442	.....	...	186	Piazzixix. 186
94	57	24.1	56.9	4	7.70	0.425	.....	2485	196	42 Aquilæ
39	3	44.0	57.3	4	7.73	0.206	.....	...	211	Piazzixix. 211
113	44	32.7	60.0	5	7.79	0.483	.....	2486	199	53 Sagittarii
113	44	44.6	59.9	4	7.81	— 0.483	.....	2488	201	Bradley 2488
20	34	37.4	54.7	8	7.89	+ 0.031	+ 1.79	2505	236	61 Draconis, σ
40	6	6.3	57.6	4	7.89	— 0.213	.....	2498	223	13 Cygni, θ
106	36	39.9	61.7	2	7.90	0.458	+ 0.02	2490	214	54 Sagittarii, e^1 (1st st.)
106	36	4.0	61.7	2	7.90	0.458	.....	...	...	Sagittarii, e^1 (2nd st.)
40	6	44.1	55.9	2	7.92	— 0.213	.....	...	...	Cygni (R)
2	23	38.2	56.9	5	7.99	+ 3.517	.....	...	...	Radcliffe 4447
41	2	18.9	55.9	6	8.00	— 0.220	.....	...	233	Piazzixix. 233
35	22		...	...	8.03	0.177	.....	...	...	Radcliffe 4406
35	21		...	...	8.03	0.177	.....	...	...	Oeltz. Arg. (N.Z.) 19475
105	47	29.3	57.0	7	8.13	0.453	.....	...	230	Piazzixix. 230
71	51	43.6	58.2	2	8.17	0.353	.....	2502	244	Bradley 2502
39	47	54.7	57.4	5	8.32	0.210	+ 0.16	2512	261	16 Cygni, c^1
39	48	22.6	57.6	5	8.33	0.210	+ 0.21	2513	262	Cygni, c^2
110	5	39.2	61.7	2	8.34	0.463	+ 0.07	2504	249	56 Sagittarii, f
52	58	54.5	55.7	4	8.42	0.282	— 0.04	2514	269	15 Cygni
79	43	30.7	59.9	9	8.45	0.374	0.00	2511	264	50 Aquilæ, γ
111	17	56.9	55.7	4	8.46	0.465	.....	...	260	Piazzixix. 260
54	14	53.3	61.8	2	— 8.51	— 0.287	.....	...	276	Piazzixix. 276

No.	Mag.	Number of Estimations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Fraction of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
1891	8.0	2	Piazzi xix. 277	19 40 31	...	...	+ 2.201	+ 0.0012	.....
1892	6.0	1.5	Piazzi xix. 278 (1st st.)	19 40 38.30	61.7	2	2.235	+ 0.0013	.....
1893	8.9	2.5	Piazzi xix. 278 (2nd st.)	19 40 38	...	...	2.235	+ 0.0013	.....
1894	5.4	3	17 Cygni, χ^1	19 41 6.71	56.2	4	2.275	+ 0.0013	- 0.001
1895	9.0	1	Cygni, χ^2	19 41 7	...	...	2.275	+ 0.0013	.....
1896	4.0*	...	7 Sagittæ, δ	19 41 8.74	57.6	2	2.675	+ 0.0002	+ 0.004
1897	6.2	7	Bradley 2515	19 41 18.98	59.2	4	3.311	- 0.0061	.....
1898	6.3	1	52 Aquilæ, π	19 42 6.30	61.6	1	2.827	- 0.0009	- 0.001
1899	5.3	2.5	8 Sagittæ, ζ (S. star)...	19 42 45.55	61.7	1	2.662	+ 0.0002	+ 0.003
1900	9.4	1.5	Sagittæ, ζ (N. star) ..	19 42 45.75	61.7	1	+ 2.662	+ 0.0002	.....
1901	7.7	6	Radcliffe 4476	19 42 56.76	56.7	7	-13.292	- 1.6976	.....
1902	7.0	4	Piazzi xix. 295	19 43 30.23	57.7	2	+ 2.288	+ 0.0013	.....
1903	1.3*	...	53 Aquilæ, α	19 43 57.08	59.7	26	2.892	- 0.0014	+ 0.036
1904	5.7	2.5	54 Aquilæ, σ	19 44 19.12	57.6	6	2.859	- 0.0012	.....
1905	6.2	6	Bradley 2529	19 44 30.32	58.6	3	+ 2.122	+ 0.0013	.....
1906	8.8	7	Radcliffe 4489	19 44 42.83	57.0	7	-13.210	- 1.7137	.....
1907	Var.	...	55 Aquilæ, η	19 45 20.18	56.4	4	+ 3.058	- 0.0031	.....
1908	5.3	5	19 Cygni	19 45 36.43	59.3	5	2.124	+ 0.0012	.....
1909	6.0	1	57 Aquilæ (1st star) ...	19 47 3	...	...	3.252	- 0.0056	.....
1910	7.0	1	57 Aquilæ (2nd star)...	19 47 3	...	...	3.252	- 0.0056	.....
1911	7.7	1	Piazzi xix. 320	19 47 13	...	...	2.638	+ 0.0004	.....
1912	7.7	1	Piazzi xix. 321	19 47 13	...	...	2.638	+ 0.0004	.....
1913	5.4	2	58 Sagittarii, ω	19 47 15.69	58.8	5	3.671	- 0.0130	+ 0.013
1914	5.1	2	59 Aquilæ, ξ	19 47 27.75	58.7	2	2.902	- 0.0016	+ 0.007
1915	6.2	8	58 Aquilæ	19 47 34.43	57.8	6	3.074	- 0.0033	.....
1916	5.0*	...	59 Sagittarii, b	19 48 21.21	56.6	3	3.693	- 0.0136	- 0.003
1917	4.2	1	60 Aquilæ, β	19 48 26.19	60.1	20	+ 2.946	- 0.0020	+ 0.002
1918	...	...	63 Draconis, ϵ	19 48 37.57	57.6	2	- 0.181	- 0.0437	+ 0.015
1919	9.8	4	Redhill 3000	19 48 53.79	58.7	3	-13.243	- 1.8017	.....
1920	5.7	3	61 Sagittarii, g	19 50 0.44	58.9	3	+ 3.409	- 0.0084	- 0.001
1921	...	...	60 Sagittarii, A	19 50 25.57	61.6	1	3.665	- 0.0133	- 0.004
1922	...	...	21 Cygni, η	19 51 3.05	57.6	2	2.252	+ 0.0014	- 0.004
1923	6.0	8	11 Sagittæ	19 51 24.03	56.4	5	2.724	- 0.0002	.....
1924	7.3	10	Bradley 2546	19 51 52.11	59.0	5	2.731	- 0.0002	.....
1925	5.5	1	24 Cygni, ψ (N. star).	19 52 1	...	...	+ 1.558	- 0.0025	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
54 15 1.2	61.8	2	— 8.51	— 0.287	.....	...	277	Piazzi xix. 277
55 19 34.4	61.7	2	8.53	0.291	.....	...	278	Piazzi xix. 278 (1st st.)
55 19 1.7	61.8	3	8.53	0.291	.....	...	...	Piazzi xix. 278 (2nd st.)
56 35 45.8	57.9	4	8.56	0.296	+ 0.44	2517	282	17 Cygni, χ^1
56 35 40.3	61.8	1	8.56	0.296	.....	...	...	Cygni, χ^2
71 48 30.1	56.2	6	8.57	0.349	— 0.03	2516	279	7 Sagittæ, δ
101 12 56.4	56.8	5	8.58	0.433	.....	2515	273	Bradley 2515
78 31 46.6	61.7	1	8.65	0.368	+ 0.04	2518	283	52 Aquilæ, π
71 12 21.2	61.8	2	8.70	0.346	— 0.02	2523	289	8 Sagittæ, ζ (S. star)
71 12 16.8	61.8	2	8.70	— 0.346	.....	...	...	Sagittæ, ζ (N. star)
4 12 33.3	57.2	3	8.71	+ 1.750	.....	...	...	Radcliffe 4476
56 54 39.1	57.7	2	8.75	— 0.296	.....	...	295	Piazzi xix. 295
81 29 54.5	57.5	15	8.79	0.376	— 0.38	2524	294	53 Aquilæ, α
79 55 54.6	57.6	4	8.82	0.371	.....	2525	298	54 Aquilæ, σ
51 38 24.3	58.7	4	8.83	— 0.274	.....	2529	304	Bradley 2529
4 12 52.0	58.6	3	8.85	+ 1.733	.....	...	...	Radcliffe 4489
89 21 3.0	59.7	3	8.90	— 0.396	.....	2526	303	55 Aquilæ, η
51 38 7.8	59.0	3	8.92	0.274	.....	2534	...	19 Cygni
98 35 21.1	61.7	2	9.03	0.420	.....	2531	313	57 Aquilæ (1st star)
98 35 57.0	61.7	2	9.03	0.420	.....	...	...	57 Aquilæ (2nd star)
70 1 26.9	61.8	2	9.04	0.339	.....	...	320	Piazzi xix. 320
70 2 2.2	61.8	2	9.04	0.339	.....	...	321	Piazzi xix. 321
116 40 2.7	56.1	6	9.05	0.474	— 0.08	2528	311	58 Sagittarii, ω
81 53 55.0	58.6	2	9.06	0.374	+ 0.09	2536	319	59 Aquilæ, ξ
90 5 22.1	55.1	4	9.07	0.396	.....	2535	318	58 Aquilæ
117 32 15.3	56.8	5	9.13	0.476	+ 0.01	2533	322	59 Sagittarii, b
83 56 25.1	57.9	8	9.14	— 0.379	+ 0.47	2538	324	60 Aquilæ, β
20 5 19.9	57.4	2	9.16	+ 0.027	+ 0.01	2554	343	63 Draconis, ϵ
4 10 6.9	60.3	3	9.18	+ 1.721	.....	...	...	Redhill 3000
105 51 38.1	58.7	1	9.26	— 0.437	+ 0.09	2540	329	61 Sagittarii, g
116 34 16.0	60.3	3	9.29	0.470	— 0.01	2539	331	60 Sagittarii, A
55 17	...	...	9.34	0.287	+ 0.03	2548	344	21 Cygni, η
73 35 7.6	56.3	6	9.37	0.347	.....	2545	340	11 Sagittæ
73 52 52.8	56.2	6	9.41	0.348	.....	2546	...	Bradley 2546
37 55 52.9	61.7	3	— 9.42	— 0.197	.....	2556	356	24 Cygni, ψ (N. star)

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
1926	...	...	24 Cygni, ψ (S. star) .	19 52 1	...	...	+ 1.558	— 0.0025	.....
1927	9.4	5	Redhill 3015.....	19 52 36.72	59.3	4	— 16.975	— 2.8866	.....
1928	5.3	4	Piazzi xix. 371.....	19 53 15.34	57.4	4	+ 1.153	— 0.0084	.....
1929	5.0*	...	62 Sagittarii, c	19 54 2.70	56.3	9	3.699	— 0.0146	0.000
1930	5.7	4	25 Cygni	19 54 47.09	57.6	4	2.199	+ 0.0014	.....
1931	6.9	4	Piazzi xix. 369.....	19 55 26.33	57.1	5	3.569	— 0.0119	.....
1932	7.3	3	Piazzi xix. 372.....	19 55 37.60	58.7	4	3.403	— 0.0087	.....
1933	7.5	1.5	Piazzi xix. 377.....	19 56 43.52	59.4	4	3.537	— 0.0114	.....
1934	7.1	5	Bradley 2567	19 57 38.28	58.2	4	2.722	— 0.0001	.....
1935	...	...	Lalande 38373.....	19 57 43.52	60.7	1	2.633	+ 0.0005	.....
1936	6.0	7.5	15 Sagittæ	19 57 48.83	57.7	6	2.723	— 0.0001	— 0.030
1937	5.3	4	16 Sagittæ, η	19 58 56.90	57.4	7	2.659	+ 0.0003	.....
1938	6.6	9	Piazzi xix. 404.....	20 0 35.00	58.1	6	3.391	— 0.0089	.....
1939	6.6	6.5	64 Aquilæ.....	20 0 47.99	57.3	5	3.094	— 0.0040	+ 0.008
1940	6.9	8.5	Piazzi xix. 406.....	20 0 51.97	57.5	5	3.285	— 0.0070	.....
1941	9.3	2.5	Piazzi xix. 415 (N. st.)	20 1 4	...	...	2.636	+ 0.0005	.....
1942	7.6	3	Piazzi xix. 415 (S. st.)	20 1 4	...	...	2.636	+ 0.0005	.....
1943	5.9	2	27 Cygni, b^1	20 1 9.77	56.6	2	2.246	+ 0.0016	.....
1944	7.5	2	Piazzi xix. 410.....	20 1 22.15	56.6	2	3.515	— 0.0114	.....
1945	7.1	3	Piazzi xix. 417.....	20 2 18.50	57.6	2	3.486	— 0.0109	.....
1946	6.0	1	66 Draconis	20 3 19	...	...	0.950	— 0.0137	+ 0.013
1947	6.7	3	Rumker 8047	20 3 21.15	58.7	2	+ 2.910	— 0.0021	.....
1948	...	...	69 Draconis	20 3 29	...	...	— 1.561	— 0.1268	.....
1949	6.4	3	Ursæ Minoris, (λ)	20 3 53.90	58.1	4	— 56.107	— 29.7603	.....
1950	7.8	3	Lalande 38659.....	20 4 11.99	60.0	3	+ 2.636	+ 0.0004	.....
1951	...	...	28 Cygni, b^2	20 4 14.08	60.7	1	2.226	+ 0.0016	— 0.001
1952	6.2	3	2 Capricorni, ξ^2	20 4 37.63	58.2	5	3.336	— 0.0081	.....
1953	6.6	5	Bradley 2581	20 4 53.83	58.2	2	2.639	+ 0.0005	.....
1954	10.0	2	*	20 6 23.91	57.7	2	2.127	+ 0.0016	.....
1955	6.1	1	Piazzi xx. 29.....	20 6 33.27	60.0	4	3.664	— 0.0154	.....
1956	6.3	3	68 Draconis	20 9 16.93	57.8	3	0.978	— 0.0138	+ 0.015
1957	5.0	2	29 Cygni, b^3	20 9 17.54	59.4	4	2.239	+ 0.0018	.....
1958	6.3	1	4 Capricorni	20 9 47.49	60.2	2	3.533	— 0.0127	+ 0.002
1959	...	...	5 Capricorni, α^1	20 9 53.16	59.6	1	3.331	— 0.0084	— 0.002
1960	3.3*	...	6 Capricorni, α^2	20 10 17.08	59.9	14	+ 3.332	— 0.0084	+ 0.001

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	+1800		"	"	"			
37 55 56.9	61.7	2	— 9.42	— 0.197	.....	...	...	24 Cygni, ψ (S. star)
3 21 55.4	59.4	3	9.47	+ 2.187	.....	...	...	Redhill 3015
31 31 38.1	56.1	7	9.51	— 0.144	.....	...	371	Piazzi xix. 371
118 5 43.0	57.4	8	9.57	0.470	— 0.02	2549	355	62 Sagittarii, c
53 20 18.9	55.7	4	9.63	0.277	.....	2557	373	25 Cygni
112 59 8.4	55.5	5	9.68	0.453	.....	...	369	Piazzi xix. 369
105 48 8.3	58.3	3	9.69	0.431	.....	...	372	Piazzi xix. 372
111 42 20.0	59.9	5	9.78	0.446	.....	...	377	Piazzi xix. 377
73 16 12.2	56.3	5	9.84	0.342	.....	2567	392	Bradley 2567
69 21	...	...	9.83	0.330	.....	...	...	Lalande 38373
73 18 24.8	56.2	6	9.86	0.342	+ 0.36	2568	393	15 Sagittæ
70 24 27.4	56.4	10	9.94	0.333	.....	2569	400	16 Sagittæ, η
105 25 48.6	56.9	6	10.07	0.423	.....	...	404	Piazzi xix. 404
91 4 42.7	55.8	5	10.09	0.386	+ 0.08	2571	408	64 Aquilæ
100 27 54.5	56.1	5	10.09	0.410	.....	...	406	Piazzi xix. 406
69 17 50.5	61.8	3	10.11	0.328	.....	...	...	Piazzi xix. 415 (N. st.)
69 17 55.0	61.8	3	10.11	0.328	.....	...	415	Piazzi xix. 415 (S. st.)
54 24 38.9	56.7	3	10.12	0.279	.....	2573	418	27 Cygni, b^1
110 59 48.2	55.5	4	10.13	0.438	.....	...	410	Piazzi xix. 410
109 47 14.0	57.1	2	10.20	0.433	.....	...	417	Piazzi xix. 417
28 24 37.8	58.6	4	10.28	0.115	— 0.05	2586	25	66 Draconis
81 57 34.7	59.4	3	10.28	— 0.360	.....	...	...	Rumker 8047
13 54 41.5	58.7	1	10.30	+ 0.199	.....	2604	47	69 Draconis
1 6 35.6	61.1	9	10.32	+ 7.021	.....	2795	424	Ursæ Minoris, (λ)
69 10 20.1	61.7	2	10.35	— 0.324	.....	...	...	Lalande 38659
53 34 14.5	59.7	2	10.35	0.274	— 0.06	2582	22	28 Cygni, b^2
103 1 28.2	54.6	3	10.37	0.412	.....	2577	16	2 Capricorni, ξ^2
69 16 47.3	55.5	4	10.39	0.325	.....	2581	...	Bradley 2581
50 18	...	...	10.51	0.259	.....	...	...	*
117 26 49.4	55.8	5	10.52	0.450	.....	...	29	Piazzi xx. 29
28 20 41.4	56.3	5	10.72	0.117	— 0.05	2610	71	68 Draconis
53 37 14.3	56.1	5	10.74	0.272	.....	2598	60	29 Cygni, b^3
112 14 21.2	60.2	4	10.76	0.431	+ 0.06	2591	53	4 Capricorni
102 56 18.7	59.7	4	10.77	0.405	0.00	2593	54	5 Capricorni, α^1
102 58 35.2	57.7	7	— 10.80	— 0.405	0.00	2595	58	6 Capricorni, α^2

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				h. m. s.	1800+		s.	s.	s.
1961	8.8	11	Radcliffe 4721	20 10 43.48	56.1	13	-11.175	-1.6881	
1962	6.4	5	Bradley 2615	20 10 52.93	57.3	3	+1.107	-0.0110	
1963	6.0	3	Bradley 2613	20 11 56.27	57.7	2	2.133	+0.0017	.....
1964	7.3	5	Bradley 2620	20 12 29.68	58.7	3	0.742	-0.0205	.....
1965	Var.	...	34 Cygni	20 12 37.58	54.7	3	+2.210	+0.0018	.....
1966	7.2	3	Piazzi xx. 119	20 12 46.01	59.6	3	-1.936	-0.1664	.....
1967	8.1	8	Radcliffe 4814	20 13 42.63	56.5	9	-41.766	-18.6349	.....
1968	7.0	7.5	Bradley 2619	20 14 33.94	57.7	4	+2.242	+0.0020	.....
1969	8.1	8	*	20 14 36.70	57.9	5	3.411	-0.0105	.....
1970	7.2	6	Piazzi xx. 102	20 15 36.23	58.1	5	3.363	-0.0094	.....
1971	6.1	6	Groombridge 3150 ...	20 16 8.26	58.9	5	0.535	-0.0278	.....
1972	2.7*	...	37 Cygni, γ	20 17 12.17	57.4	5	2.151	+0.0019	0.000
1973	5.0	1	10 Capricorni, π	20 19 18.27	57.5	5	+3.443	-0.0115	-0.002
1974	7.0	15	Groombridge 3212 ...	20 19 21.47	56.2	11	-7.830	-1.0336	.....
1975	7.6	7	Radcliffe 4810	20 20 45.52	55.8	8	-10.352	-1.6336	.....
1976	5.2	1	11 Capricorni, ρ	20 20 52.21	59.7	17	+3.433	-0.0114	-0.006
1977	6.9	5.5	Bradley 2627	20 21 0.74	57.0	5	3.434	-0.0113	.....
1978	8.4	4	72 Draconis	20 21 7.91	58.0	3	+1.035	-0.0138	.....
1979	9.2	8	Radcliffe 4878	20 21 11.08	56.5	7	-37.365	-16.1878	.....
1980	6.0	2	Piazzi xx. 146	20 21 18.42	60.2	2	-3.532	-0.0139	.....
1981	5.0*	...	69 Aquilæ.....	20 22 20.02	59.7	3	+3.136	-0.0053	+0.005
1982	9.3	0.5	Redhill 3102.....	20 22 50	...	...	-8.724	-1.2586	.....
1983	7.2	5.5	Oeltz. Arg. (s.z.) 20562	20 22 52.76	58.2	6	+3.388	-0.0106	.....
1984	8.2	3	Piazzi xx. 166	20 24 1.62	59.0	3	3.523	-0.0139	.....
1985	8.6	3	Piazzi xx. 167	20 24 3.72	59.0	3	3.523	-0.0139	.....
1986	6.8	5	Bradley 2638 (1st st.)	20 24 31.10	57.9	3	2.866	-0.0014	.....
1987	7.0	1.5	Piazzi xx. 170	20 24 31.84	56.9	5	3.585	-0.0157	.....
1988	7.5	4	Bradley 2638 (2nd st.)	20 24 32.15	57.9	3	2.866	-0.0014	.....
1989	7.7	1	Piazzi xx. 180	20 25 20.10	57.7	4	3.523	-0.0141	.....
1990	6.4	3	Groombridge 3196 ...	20 25 21.65	59.3	3	1.978	+0.0013	.....
1991	7.6	7	Bradley 2655	20 26 31.09	57.9	4	0.376	-0.0368	.....
1992	...	...	2 Delphini, ϵ	20 26 31.47	61.7	1	+2.867	-0.0013	-0.003
1993	7.5	17.5	Radcliffe 4881	20 28 30.52	56.7	16	-8.308	-1.2321	.....
1994	4.7	1	4 Delphini, ζ	20 28 45.68	60.6	4	+2.803	-0.0005	0.000
1995	7.5	8.5	Groombridge 3260 ...	20 29 22.71	54.7	6	-7.204	-0.9959	

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° ' "	1800+		"	"	"			
4 30 57.3	55.7	2	— 10.83	+ 1.377		...	...	Radcliffe 4721
29 47 13.5	56.8	6	10.84	— 0.132		2615	82	Bradley 2615
50 3 59.3	57.9	4	10.92	0.257	.....	2163	...	Bradley 2613
25 39 54.7	60.4	3	10.96	0.087	.....	2620	99	Bradley 2620
52 24 2.8	56.7	3	10.97	— 0.266	.....	2614	89	34 Cygni
12 35 43.1	59.7	3	10.98	+ 0.240	.....	...	119	Piazz. xx. 119
1 25 32.8	56.1	6	11.05	+ 5.088	.....	...	...	Radcliffe 4814
53 18 22.7	56.2	5	11.11	— 0.267	.....	2619	...	Bradley 2619
106 57 49.1	57.7	5	11.11	0.409	.....	...	...	*
104 42 9.1	55.5	4	11.19	0.403	.....	...	102	Piazz. xx. 102
23 35 47.1	58.6	3	11.22	0.060	.....	...	...	Groombridge 3150
50 11 21.9	56.6	9	11.31	0.254	— 0.02	2624	124	37 Cygni, γ
108 40 6.0	56.1	5	11.45	— 0.407	— 0.02	2623	131	10 Capricorni, π
5 44 51.2	56.4	9	11.46	+ 0.942	.....	...	...	Groombridge 3212
4 39 12.3	57.4	2	11.55	+ 1.239	.....	...	...	Radcliffe 4810
108 16 25.2	58.6	8	11.56	— 0.404	+ 0.01	2626	142	11 Capricorni, ρ
108 19 55.9	55.8	5	11.58	0.404	.....	2627	144	Bradley 2627
28 11 12.0	57.2	4	11.58	— 0.118	.....	...	162	72 Draconis
1 32 44.5	56.7	3	11.59	+ 4.453	.....	...	...	Radcliffe 4878
112 51 9.8	60.2	4	11.60	— 0.415	.....	...	146	Piazz. xx. 146
93 20 55.2	55.2	8	11.67	— 0.367	0.00	2633	157	69 Aquilæ
5 15 29.4	58.2	2	11.71	+ 1.038	.....	...	...	Redhill 3102
106 14 15.5	57.7	4	11.71	— 0.396	.....	...	...	Oeltz. Arg. (s. z.) 20562
112 37 29.6	56.3	5	11.79	0.410	.....	...	166	Piazz. xx. 166
112 37 53.9	55.7	4	11.79	0.410	.....	...	167	Piazz. xx. 167
79 12 32.8	61.5	4	11.82	0.333	.....	2638	178	Bradley 2638 (1st st.)
115 24 46.9	55.8	5	11.82	0.417	.....	...	170	Piazz. xx. 170
79 12 28.9	60.5	6	11.82	0.333	.....	2638	...	Bradley 2638 (2nd st.)
112 42 11.8	56.5	4	11.88	0.409	.....	...	180	Piazz. xx. 180
44 32 42.6	60.7	3	11.88	0.228	.....	...	...	Groombridge 3196
21 41 57.4	57.1	8	11.96	0.039	.....	2655	208	Bradley 2655
79 10	...	...	11.96	— 0.330	+ 0.02	2642	191	2 Delphini, ϵ
5 21 6.7	56.3	6	12.10	+ 0.971	.....	...	...	Radcliffe 4881
75 48 21.9	61.7	3	12.12	— 0.321	— 0.02	2648	207	4 Delphini, ζ
5 54 20.9	57.4	5	— 12.16	+ 0.840		...	...	Groombridge 3260

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				h. m. s.	1800+		s.	s.	s.
1996	6.0	1	13 Capricorni, τ^1	20 29 29.90	61.8	1	+ 3.369	- 0.0106	
1997	6.8	5	26 Vulpeculæ	20 30 8.24	57.7	5	+ 2.568	+ 0.0016	
1998	6.9	17	Radcliffe 4894	20 30 15.40	56.1	12	- 8.305	- 1.2525	.....
1999	...	...	6 Delphini, β	20 30 59	...	...	+ 2.806	- 0.0005	+ 0.005
2000	8.3	4	24 Cephei (Hev.)	20 31 1.52	57.4	7	-43.554	-23.6447	.....
2001	5.7	3	14 Capricorni, τ^2	20 31 26.33	61.0	3	+ 3.364	- 0.0106	- 0.002
2002	5.2	1	15 Capricorni, ν	20 32 4.55	56.8	5	3.427	- 0.0122	0.000
2003	5.0*	...	1 Aquarii	20 32 14.59	59.4	3	+ 3.072	- 0.0044	.....
2004	5.2	1	7 Delphini, κ	20 32 19.66	58.7	3	2.894	- 0.0017	.....
2005	8.0	5	W.B. (1) XX. 821 ...	20 32 31.51	60.0	3	2.989	- 0.0030	.....
2006	...	...	9 Delphini, α	20 33 8.07	59.2	2	2.782	- 0.0002	+ 0.006
2007	6.6	3	Bradley 2669	20 33 9.37	59.9	4	2.873	- 0.0013	.....
2008	8.7	1	*	20 33 10	...	...	2.989	- 0.0031	.....
2009	Var.	...	Capricorni (S).....	20 33 43.39	57.4	3	3.444	- 0.0128	.....
2010	6.7	4	Bradley 2671	20 34 3.95	58.1	2	+ 2.789	- 0.0003	.....
2011	8.5	5	Radcliffe 4926	20 34 56.60	56.6	4	-11.191	- 2.1164	.....
2012	6.8	6	Bradley 2701	20 35 30.73	59.3	2	- 3.468	- 0.3821	.....
2013	8.2	6	Σ 2718 (1st star)	20 35 55.20	56.4	4	2.847	- 0.0009	.....
2014	8.3	6	Σ 2718 (2nd star).....	20 35 55.76	56.6	2	- 2.847	- 0.0009	.....
2015	1.7*	...	50 Cygni, α	20 36 39.47	59.5	26	+ 2.043	+ 0.0022	- 0.002
2016	5.5	3	75 Draconis	20 36 51	...	...	- 3.425	- 0.3809	+ 0.009
2017	6.1	3	74 Draconis	20 37 23.39	57.7	3	- 3.172	- 0.3494	.....
2018	4.7	1	16 Capricorni, ψ	20 37 48.12	57.4	4	+ 3.570	- 0.0168	.....
2019	5.8	4.5	51 Cygni	20 37 53.41	59.0	3	1.849	+ 0.0006	.....
2020	4.9	1	30 Vulpeculæ	20 38 48.98	60.2	4	+ 2.597	+ 0.0018	.....
2021	7.4	1.5	Oeltz. Arg. (N.Z.) 21012	20 39 10.28	59.7	2	- 0.784	- 0.1112	.....
2022	8.1	11	Radcliffe 4980	20 39 35.95	55.6	11	-20.414	- 6.2607	.....
2023	5.2	3	52 Cygni (1st star) ...	20 39 52.70	61.8	1	+ 2.475	+ 0.0017	.....
2024	9.5	2	52 Cygni (2nd star)...	20 39 53	...	...	2.475	+ 0.0017	.....
2025	4.5	1	2 Aquarii, ϵ	20 40 5.35	61.8	1	3.253	- 0.0084	- 0.001
2026	6.3	3	12 Delphini, γ^1	20 40 8.85	56.7	3	2.786	- 0.0001	.....
2027	3.3*	...	12 Delphini, γ^2	20 40 9.80	57.7	4	2.786	- 0.0001	- 0.004
2028	2.7*	...	53 Cygni, ϵ	20 40 32.80	57.0	6	+ 2.397	+ 0.0029	+ 0.029
2029	7.1	2	Bradley 2711	20 41 24.71	59.4	3	- 2.135	- 0.2385	- 0.011
2030	3.0*	...	3 Cephei, η	20 42 26.15	58.2	6	+ 1.219	- 0.0111	+ 0.014

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° ' "	1800 +		"	"	"			
105 37 48.0	61.8	2	— 12.18	— 0.385		2646	209	13 Capricorni, τ^1
64 36 1.7	55.8	5	12.22	— 0.292		2653	220	26 Vulpeculæ
5 19 18.8	56.1	6	12.23	+ 0.965	.....	...	...	Radcliffe 4894
75 53 23.7	57.5	1	12.27	— 0.319	+ 0.04	2656	227	6 Delphini, β
1 17 58.2	55.9	4	12.27	+ 5.029	.....	...	...	24 Cephei (Hev.)
105 26 36.3	61.0	6	12.31	— 0.382	+ 0.03	2652	225	14 Capricorni, τ^2
108 37 45.1	59.7	3	12.35	0.389	— 0.02	2657	233	15 Capricorni, ν
90 0 10.5	56.5	6	12.37	0.347	.....	2661	237	1 Aquarii
80 24 16.9	55.3	4	12.37	0.327	.....	2663	242	7 Delphini, κ
85 31 21.0	60.3	2	12.38	0.338	.....	...	...	W.B. (1) XX. 821
74 34 47.2	57.7	1	12.42	0.313	— 0.03	2670	254	9 Delphini, α
79 14 44.7	57.1	5	12.43	0.323	.....	2669	...	Bradley 2669
85 28 37.7	59.7	1	12.43	0.337	.....	...	...	*
109 33 14.1	57.7	2	12.47	0.389	.....	...	...	Capricorni (S)
74 51 10.6	57.7	2	12.49	— 0.314	.....	2671	...	Bradley 2671
4 10 54.9	60.7	3	12.55	+ 1.279	.....	...	...	Radcliffe 4926
9 2 41.7	61.0	4	12.59	+ 0.395	.....	2701	316	Bradley 2701
77 46 12.6	58.9	5	12.62	— 0.318	.....	...	...	Σ 2718 (1st star)
77 46 11.3	59.9	4	12.62	0.318	.....	...	...	Σ 2718 (2nd star)
45 13 7.3	58.1	12	12.67	— 0.226	0.00	2679	285	50 Cygni, α
9 3 35.5	59.7	5	12.68	+ 0.388	+ 0.01	2704	331	75 Draconis
9 24 6.1	57.7	3	12.72	+ 0.359	.....	2705	333	74 Draconis
115 46 16.4	55.4	4	12.74	— 0.397	.....	2676	282	16 Capricorni, ψ
40 9 42.2	58.8	3	12.75	— 0.202	.....	2683	293	51 Cygni
65 13 40.7	55.4	4	12.81	— 0.286	.....	2680	294	30 Vulpeculæ
14 55 6.1	58.0	3	12.83	+ 0.094	.....	...	...	Oeltz. Arg. (N.Z.) 21012
2 30 2.5	56.0	4	12.86	+ 2.290	.....	...	...	Radcliffe 4980
59 47 21.7	61.8	2	12.89	— 0.271	.....	2687	306	52 Cygni (1st star)
59 47 19.2	61.8	2	12.89	0.271	.....	...	...	52 Cygni (2nd star)
100 0 21.9	61.7	1	12.90	0.358	+ 0.01	2681	299	2 Aquarii, ϵ
74 22 41.1	55.7	5	12.90	0.306	.....	2685	303	12 Delphini, γ^1
74 22 40.8	55.1	7	12.90	0.305	+ 0.20	2686	304	12 Delphini, γ^2
56 33 8.0	55.1	7	12.93	— 0.262	— 0.32	2689	313	53 Cygni, ϵ
11 4 6.5	58.7	2	12.98	+ 0.243		2711	...	Bradley 2711
28 42 15.1	58.1	5	— 13.05	— 0.129	— 0.87	2698	338	3 Cephei, η

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				h. m. s.	1800+		s.	s.	s.
2031	6.4	6	15 Delphini	20 42 57.43	58.5	5	+ 2.856	— 0.0009	+ 0.002
2032	4.6	1	18 Capricorni, ω	20 43 27.64	58.3	3	3.597	— 0.0184	— 0.003
2033	5.4	4	56 Cygni	20 45 6.49	57.2	6	2.117	+ 0.0030	.....
2034	6.0	3	Lalande 40335	20 45 31.55	61.1	3	2.544	+ 0.0025	.....
2035	8.5	2	Piazzi xx. 355	20 45 49	...	...	2.952	— 0.0023	.....
2036	8.5	2	Piazzi xx. 356	20 45 53	...	...	2.953	— 0.0023	.....
2037	4.8	9	32 Vulpeculæ	20 48 35.60	59.8	27	2.555	+ 0.0026	— 0.002
2038	7.4	9	Piazzi xx. 391	20 49 18.14	57.1	5	1.713	— 0.0008	.....
2039	6.2	8.5	Bradley 2720	20 51 6.08	56.1	5	2.024	+ 0.0028	.....
2040	5.9	4	18 Delphini	20 51 41.21	58.6	6	2.894	— 0.0013	.....
2041	5.4	8	1 Equulei (1st star) ...	20 52 4.67	58.7	4	3.008	— 0.0033	.....
2042	7.8	8	1 Equulei (2nd star)...	20 52 5.42	59.0	4	+ 3.008	— 0.0033	.....
2043	7.7	4	Oeltz. Arg. (N.Z.) 21410	20 52 34.17	60.0	4	— 0.381	— 0.0935	.....
2044	6.7	3.5	10 Aquarii.....	20 53 8.67	59.0	5	+ 3.175	— 0.0069	.....
2045	6.6	3	11 Aquarii.....	20 53 11.57	59.2	5	3.162	— 0.0066	.....
2046	5.9	3.5	Bradley 2726	20 53 18.77	57.4	3	2.135	+ 0.0035	.....
2047	7.8	4	Piazzi xx. 425	20 55 4.25	57.4	3	3.536	— 0.0177	.....
2048	...	...	2 Equulei	20 55 18.13	61.8	1	+ 2.960	— 0.0024	.....
2049	8.0	11	Radcliffe 5090	20 55 46.38	56.6	12	— 8.250	— 1.5533	.....
2050	5.4	5	22 Capricorni, η	20 56 26.10	58.6	6	+ 3.429	— 0.0143	— 0.006
2051	6.7	12	Bradley 2740	20 57 38.96	56.3	11	2.323	+ 0.0040	.....
2052	...	...	23 Capricorni, θ	20 58 4.36	59.5	5	3.378	— 0.0128	+ 0.004
2053	Var.	...	Vulpeculæ (R).....	20 58 10	...	...	2.662	+ 0.0022	.....
2054	6.2	2	4 Equulei	20 58 30.30	57.5	6	2.982	— 0.0028	— 0.011
2055	6.7	1	Bradley 2736	20 58 43.10	59.0	5	3.432	— 0.0146	.....
2056	7.6	8	Piazzi xx. 470	21 0 18.29	59.5	4	3.173	— 0.0072	.....
2057	5.7	5.5	25 Capricorni, χ	21 0 32.18	58.5	6	3.449	— 0.0153	— 0.001
2058	5.4	19	61 Cygni (1st star) ...	21 0 37.43	58.2	18	2.334	+ 0.0043	+ 0.339
2059	6.2	15	61 Cygni (2nd star) ...	21 0 38.93	56.4	11	2.334	+ 0.0043	+ 0.345
2060	8.1	3	W.B. (2) XXI. 3	21 1 26.83	58.7	2	2.339	+ 0.0043	.....
2061	6.6	4	27 Capricorni	21 1 32.38	58.9	6	3.435	— 0.0150	.....
2062	...	...	13 Aquarii, ν	21 1 57.92	61.1	3	3.270	— 0.0098	+ 0.001
2063	7.9	15	Lalande 41030	21 2 37.52	55.6	10	2.343	+ 0.0045	.....
2064	9.5	2	Piazzi xxi. 1 (1st st.) .	21 2 42	...	...	2.540	+ 0.0035	.....
2065	6.2	2	Piazzi xxi. 1 (2nd st.) .	21 2 42.59	61.8	1	+ 2.540	+ 0.0035	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
77 58 34.5	55.8	5	— 13.09	— 0.310	— 0.09	2693	330	15 Delphini
117 26 25.4	56.0	6	13.12	0.391	+ 0.03	2690	328	18 Capricorni, ω
46 27 59.6	56.7	9	13.23	0.226	.....	2702	357	56 Cygni
62 16 19.8	61.7	3	13.26	0.272	.....	...	...	Lalande 40335
83 11 39.7	61.8	3	13.28	0.317	.....	...	355	Piazzi xx. 355
83 12 13.1	61.8	3	13.28	0.317	.....	...	356	Piazzi xx. 356
62 28 22.7	58.2	11	13.46	0.271	0.00	2709	379	32 Vulpeculæ
36 1 9.0	56.3	7	13.51	0.179	.....	...	391	Piazzi xx. 391
43 7 3.8	56.7	7	13.62	0.211	.....	2720	...	Bradley 2720
79 41 54.8	56.0	6	13.66	0.304	.....	2716	399	18 Delphini
86 14 29.0	56.9	9	13.68	0.315	.....	2717	404	1 Equulei (1st star)
86 14 26.2	59.7	7	13.68	— 0.315	.....	...	...	1 Equulei (2nd star)
15 46 28.7	58.2	4	13.72	+ 0.047	.....	...	...	Oeltz. Arg. (N.Z.) 21410
96 1 15.2	56.3	5	13.75	— 0.332	.....	2721	413	10 Aquarii
95 16 7.9	56.5	5	13.75	0.330	.....	2723	414	11 Aquarii
46 4 20.3	56.3	4	13.76	0.221	.....	2726	...	Bradley 2726
115 37 24.5	58.2	4	13.88	0.366	.....	...	425	Piazzi xx. 425
83 22	...	...	13.89	— 0.305	.....	2728	431	2 Equulei
4 51 35.9	56.1	4	13.92	+ 0.872	.....	...	...	Radcliffe 5090
110 24 21.9	58.4	3	13.96	— 0.353	+ 0.05	2729	436	22 Capricorni, η
51 53 39.6	55.4	6	14.04	0.236	.....	2740	455	Bradley 2740
107 47 14.1	58.0	4	14.06	0.345	+ 0.05	2733	451	23 Capricorni, θ
66 43 55.1	59.7	2	14.07	0.271	.....	...	...	Vulpeculæ (R)
84 35 35.4	56.2	5	14.09	0.304	+ 0.13	2739	458	4 Equulei
110 44 16.2	57.0	4	14.11	0.350	.....	2736	454	Bradley 2736
96 8 9.5	56.2	6	14.20	0.322	.....	...	470	Piazzi xx. 470
111 45 12.8	58.1	3	14.21	0.349	+ 0.03	2741	469	25 Capricorni, χ
51 56 12.2	58.6	12	14.22	0.234	— 3.22	2744	475	61 Cygni (1st star)
51 56 18.2	58.8	10	14.22	0.234	— 3.00	2745	476	61 Cygni (2nd star)
52 1 17.0	61.8	2	14.27	0.233	.....	...	...	W.B. (2) XXI. 3
111 6 59.3	57.5	5	14.28	0.346	.....	2743	478	27 Capricorni
101 56	...	...	14.30	0.328	+ 0.01	2747	485	13 Aquarii, ν
52 2 5.6	57.7	10	14.34	0.233	.....	...	...	Lalande 41030
60 21 25.3	61.8	4	14.34	0.253	.....	...	...	Piazzi xxi. 1 (1st st.)
60 21 28.4	61.8	4	— 14.34	— 0.253	.....	...	1	Piazzi xxi. 1 (2nd st.)

No.	Mag.	Number of Estimations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.			Mean Year and Fraction of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h.	m.	s.	1800+				
2066	4.8	1	5 Equulei, γ	21	3	31.89	56.5	5	+ 2.915	- 0.0013	+ 0.005
2067	5.7	1	6 Equulei	21	3	43	...	...	2.917	- 0.0013	.....
2068	3.5	1	64 Cygni, ζ	21	6	58.71	59.4	30	2.550	+ 0.0038	- 0.003
2069	4.8	1	7 Equulei, δ	21	7	39.64	56.5	5	2.920	- 0.0013	+ 0.012
2070	7.2	5.5	Piazzi xxi. 50	21	8	56.70	55.9	5	2.295	+ 0.0050	.....
2071	4.3	2	65 Cygni, τ	21	9	12.28	57.9	6	2.378	+ 0.0049	+ 0.013
2072	6.6	2	Piazzi xxi. 61	21	9	13.26	57.1	5	1.532	- 0.0040	.....
2073	8.3	4	*	21	9	21	...	...	3.444	- 0.0160	.....
2074	7.7	2	W.B. (1) XXI. 228 ...	21	10	55.96	61.7	1	2.940	- 0.0016	.....
2075	8.9	5	W.B. (1) XXI. 246 ...	21	11	37.25	58.7	2	2.941	- 0.0016	.....
2076	7.4	7	W.B. (1) XXI. 249 ...	21	11	44.29	58.7	2	+ 2.940	- 0.0016	.....
2077	8.3	3.5	Redhill 3232	21	11	57.57	58.5	2	- 7.838	- 1.6511	.....
2078	...	...	66 Cygni, ν	21	12	9.63	59.7	2	+ 2.462	+ 0.0047	0.000
2079	Var.	...	Capricorni (T)	21	14	12.55	55.6	1	3.322	- 0.0120	.....
2080	4.8	1	32 Capricorni, ι	21	14	26.78	59.7	11	3.350	- 0.0130	0.000
2081	2.7*	...	5 Cephei, α	21	15	14.18	58.4	17	1.416	- 0.0071	+ 0.021
2082	9.7	8	1 Pegasi (1st star)	21	15	34.81	58.7	5	2.765	+ 0.0018	.....
2083	4.3	3	1 Pegasi (2nd star) ...	21	15	36.62	59.5	4	2.765	+ 0.0018	.....
2084	5.8	2	33 Capricorni	21	16	13.00	60.1	3	3.417	- 0.0156	.....
2085	7.5	0.5	Piazzi xxi. 98	21	16	14.81	55.7	1	+ 3.480	- 0.0180	.....
2086	6.0	1	Bradley 2796	21	17	10.39	58.7	2	- 0.539	- 0.1285	.....
2087	7.7	3.5	Piazzi xxi. 108	21	17	40.65	58.0	4	+ 3.493	- 0.0187	.....
2088	6.2	6	19 Aquarii	21	17	41.46	58.5	7	3.230	- 0.0092	.....
2089	4.0*	...	34 Capricorni, ζ	21	18	40.17	55.4	5	3.440	- 0.0167	- 0.002
2090	8.3	5.5	Piazzi xxi. 127	21	20	13.80	58.7	2	3.424	- 0.0163	.....
2091	4.7*	...	36 Capricorni, b	21	20	44.01	57.0	6	3.426	- 0.0164	.....
2092	6.1	4	35 Vulpeculæ	21	21	29.90	57.2	6	2.637	+ 0.0040	.....
2093	6.6	5	Piazzi xxi. 156	21	22	8.06	57.7	5	1.973	+ 0.0045	.....
2094	3.0*	...	22 Aquarii, β	21	24	11.13	60.2	25	3.163	- 0.0072	- 0.001
2095	5.2	2	71 Cygni, g	21	24	17.00	57.1	5	+ 2.205	+ 0.0064	- 0.002
2096	7.0	6	Bradley 2832	21	24	38.10	58.5	4	- 4.480	- 0.8217	.....
2097	8.7	9.5	Radcliffe 5290	21	25	21.83	55.6	10	- 12.689	- 4.0778	.....
2098	7.3	5	Piazzi xxi. 171	21	25	55.85	57.2	6	+ 3.324	- 0.0127	.....
2099	8.5	9	Cephei, β^1	21	26	48.19	56.7	3	+ 0.802	- 0.0340	.....
2100	7.6	5	Groombridge 3548 ...	21	26	49.42	56.1	9	- 10.284	- 2.9064	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
80 25 49.1	57.2	7	— 14.40	— 0.290	+ 0.18	2751	6	5 Equulei, γ
80 31 13.8	58.7	2	14.41	0.289	.....	2752	10	6 Equulei
60 20 43.9	57.8	15	14.61	0.249	+ 0.07	2760	35	64 Cygni, ζ
80 33 30.2	55.7	11	14.65	0.285	+ 0.30	2761	38	7 Equulei, δ
49 25 57.5	56.7	6	14.72	0.222	.....	...	50	Piazzi xxi. 50
52 33 2.1	55.8	5	14.74	0.229	— 0.47	2767	54	65 Cygni, τ
30 28 44.9	57.1	3	14.75	0.146	.....	...	61	Piazzi xxi. 61
112 19 14.1	61.3	4	14.74	0.334	.....	...	...	*
81 40 56.5	61.0	3	14.84	0.282	.....	...	...	W.B. (1) XXI. 228
81 40 34.8	59.9	3	14.88	0.282	.....	...	...	W.B. (1) XXI. 246
81 37 30.8	59.9	5	14.89	— 0.282	.....	...	68	W.B. (1) XXI. 249
4 41 18.4	60.7	4	14.90	+ 0.771	.....	...	...	Redhill 3232
55 41 21.0	57.7	5	14.91	— 0.234	+ 0.01	2770	76	66 Cygni, ν
105 45	...	...	15.03	0.315	.....	...	...	Capricorni (T)
107 25 42.9	58.1	5	15.05	0.317	— 0.02	2772	84	32 Capricorni, ι
28 0 24.8	59.5	20	15.09	0.130	— 0.01	2786	105	5 Cephei, α
70 47 10.9	61.3	5	15.12	0.260	.....	...	...	1 Pegasi (1st star)
70 47 33.6	56.9	13	15.12	0.260	.....	2780	100	1 Pegasi (2nd star)
111 26 41.5	60.5	4	15.15	0.321	.....	2778	99	33 Capricorni
115 1 9.2	56.0	5	15.15	— 0.327	.....	...	98	Piazzi xxi. 98
13 34 42.4	58.1	3	15.20	+ 0.056	.....	2796	137	Bradley 2796
115 50 21.1	57.0	4	15.23	— 0.325	.....	...	108	Piazzi xxi. 108
100 20 32.7	57.3	4	15.23	0.301	.....	2782	110	19 Aquarii
113 0 56.3	56.6	6	15.29	0.319	— 0.02	2785	118	34 Capricorni, ζ
112 19 19.8	60.0	5	15.37	0.314	.....	...	127	Piazzi xxi. 127
112 24 52.5	56.6	6	15.40	0.314	.....	2790	132	36 Capricorni, δ
62 59 57.4	55.3	5	15.45	0.239	.....	2793	149	35 Vulpeculæ
37 42 29.7	57.1	5	15.49	0.176	.....	...	156	Piazzi xxi. 156
96 11 7.5	58.2	9	15.60	0.283	0.00	2797	162	22 Aquarii, β
44 4 31.9	57.2	5	15.60	— 0.195	— 0.11	2799	168	71 Cygni, g
6 20 10.0	57.7	3	15.62	+ 0.417	.....	2832	...	Bradley 2832
3 2 0.7	56.7	3	15.66	+ 1.163	.....	...	...	Radcliffe 5290
106 48 52.6	57.2	4	15.69	— 0.295	.....	...	171	Piazzi xxi. 171
20 3 18.2	60.7	10	15.74	— 0.066		...	...	Cephei, β^1
3 32 59.3	58.8	2	— 15.74	+ 0.936		...	...	Groombridge 3548

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				h. m. s.	1800+		s.	s.	s.
2101	3.2	1	8 Cephei, β^2	21 26 50.22	56.5	4	+ 0.802	- 0.0342	0.000
2102	7.0	6	Piazzi xxi. 194	21 26 59.99	58.4	6	1.705	+ 0.0004	
2103	5.7*	...	8 Piscis Australis	21 28 3.43	55.7	2	+ 3.487	- 0.0197	.....
2104	5.9	3	Groombridge 3511	21 28 49.67	57.1	3	- 1.534	- 0.2677	.....
2105	5.7	3	72 Cygni	21 29 3.60	59.5	4	+ 2.435	+ 0.0065	.....
2106	4.7*	...	39 Capricorni, ϵ	21 29 14.23	56.4	4	3.371	- 0.0149	.....
2107	5.2	3	23 Aquarii, ξ	21 30 17.85	60.9	6	3.193	- 0.0082	+ 0.004
2108	7.5	6.5	Piazzi xxi. 216	21 30 44.85	59.0	4	2.987	- 0.0020	.....
2109	6.5	5	3 Pegasi	21 30 45.75	60.8	2	2.987	- 0.0020	.....
2110	5.8	2	5 Pegasi	21 31 12.32	57.9	5	+ 2.798	+ 0.0023	.....
2111	9.7	1	Redhill 3294	21 32 9	...	...	-14.059	- 5.1633	.....
2112	6.6	1.5	24 Aquarii	21 32 18.33	59.3	4	+ 3.082	- 0.0047	.....
2113	3.7*	...	40 Capricorni, γ	21 32 19.74	57.6	9	3.322	- 0.0131	+ 0.013
2114	7.1	3	Piazzi xxi. 241	21 33 27.02	57.4	3	1.592	- 0.0020	.....
2115	5.9	3	42 Capricorni	21 33 55.82	58.9	5	3.280	- 0.0115	- 0.014
2116	5.3	1	41 Capricorni	21 34 2.05	58.0	4	3.424	- 0.0176	+ 0.006
2117	8.4	1.5	Piazzi xxi. 248 (1st st.)	21 34 37	...	...	1.858	+ 0.0039	.....
2118	6.4	2.5	Piazzi xxi. 248 (2nd st.)	21 34 37.19	61.8	1	1.858	+ 0.0039	.....
2119	8.4	1.5	Piazzi xxi. 248 (3rd st.)	21 34 37	...	...	1.858	+ 0.0039	.....
2120	5.3	2	43 Capricorni, κ	21 34 50.10	58.2	4	3.352	- 0.0145	+ 0.005
2121	6.5	4	Bradley 2827	21 35 42.50	58.1	5	2.930	- 0.0004	.....
2122	7.7	1	Piazzi xxi. 256 (1st st.)	21 36 1	...	...	1.864	+ 0.0041	.....
2123	9.0	1	Piazzi xxi. 256 (2nd st.)	21 36 1	...	...	1.864	+ 0.0041	.....
2124	6.5	2	45 Capricorni	21 36 22.04	58.8	5	3.288	- 0.0120	.....
2125	6.9	4	Bradley 2854	21 37 12.23	57.7	2	0.847	- 0.0341	.....
2126	2.3*	...	8 Pegasi, ϵ	21 37 18.55	59.2	18	2.945	- 0.0006	+ 0.003
2127	7.2	6	Bradley 2833	21 37 27.07	59.0	3	3.205	- 0.0088	.....
2128	5.3	3	46 Capricorni, c^1	21 37 32.14	61.8	1	3.205	- 0.0088	- 0.003
2129	5.0	3	78 Cygni, μ^1	21 37 52.86	59.1	3	2.657	+ 0.0054	} + 0.016
2130	6.0	4	78 Cygni, μ^2	21 37 53.27	58.1	5	2.657	+ 0.0054	
2131	Var.	...	Piazzi xxi. 285	21 39 13.35	55.7	2	1.832	+ 0.0039	.....
2132	3.0*	...	49 Capricorni, δ	21 39 18.52	57.6	12	3.304	- 0.0128	+ 0.014
2133	6.9	5	Bradley 2851	21 39 35.74	58.7	3	2.715	+ 0.0046	.....
2134	5.0*	...	11 Cephei	21 39 51.35	58.3	2	0.883	- 0.0329	+ 0.028
2135	7.0	2	Bradley 2852	21 40 1.71	57.7	2	+ 2.716	+ 0.0047	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
20 3 13.6	58.8	25	— 15.74	— 0.066	+ 0.04	2811	198	8 Cephei, β^2
31 12 2.0	57.1	3	15.75	0.147	.....	...	194	Piazzi xxi. 194
116 47 36.1	55.5	5	15.81	— 0.306	.....	2802	188	8 Piscis Australis
10 5 10.9	55.7	6	15.85	+ 0.144	.....	...	...	Groombridge 3511
52 5 30.9	57.7	3	15.86	— 0.211	.....	2809	203	72 Cygni
110 5 29.4	59.2	4	15.87	0.294	.....	2806	197	39 Capricorni, ϵ
98 28 48.9	60.4	3	15.93	0.276	+ 0.04	2808	209	23 Aquarii, ξ
83 59 53.8	60.6	5	15.95	0.258	.....	...	216	Piazzi xxi. 216
84 0 32.2	61.0	4	15.95	0.258	.....	2812	217	3 Pegasi
71 18 35.3	59.5	4	15.98	— 0.240	.....	2814	219	5 Pegasi
2 41 11.8	61.3	2	16.03	+ 1.240	.....	...	...	Redhill 3294
90 40 56.6	56.3	3	16.04	— 0.263	.....	2816	224	24 Aquarii
107 17 35.0	56.9	8	16.04	0.284	+ 0.03	2815	223	40 Capricorni, γ
28 19 48.5	57.2	4	16.09	0.132	.....	...	241	Piazzi xxi. 241
104 40 12.7	57.1	5	16.12	0.278	+ 0.30	2820	235	42 Capricorni
113 53 39.4	57.5	5	16.12	0.290	+ 0.10	2819	234	41 Capricorni
33 8 20.1	61.8	2	16.16	0.154	.....	...	...	Piazzi xxi. 248 (1st st.)
33 8 37.2	61.8	2	16.16	0.154	.....	...	248	Piazzi xxi. 248 (2nd st.)
33 8 41.8	61.8	2	16.16	0.154	.....	...	...	Piazzi xxi. 248 (3rd st.)
109 30	...	...	16.17	0.282	+ 0.01	2821	238	43 Capricorni, κ
79 48 43.9	57.4	4	16.21	0.245	.....	2827	249	Bradley 2827
33 3 9.3	61.8	1	16.23	0.153	.....	...	256	Piazzi xxi. 256 (1st st.)
33 3 3.0	61.8	1	16.23	0.153	.....	...	...	Piazzi xxi. 256 (2nd st.)
105 23 19.4	56.7	3	16.25	0.274	.....	2828	251	45 Capricorni
19 19 23.9	59.9	3	16.29	0.065	.....	2854	...	Bradley 2854
80 45 54.5	56.9	5	16.29	0.244	0.00	2835	260	8 Pegasi, ϵ
99 40 42.1	60.8	3	16.30	0.265	.....	2833	257	Bradley 2833
99 43 24.9	61.8	2	16.30	0.265	— 0.01	2834	258	46 Capricorni, c^1
61 53 15.8	60.6	6	16.32	0.218	+ 0.26	2839	266	78 Cygni, μ^1
61 53 18.3	60.5	4	16.32	0.218	.....	2840	...	78 Cygni, μ^2
31 51 39.5	57.2	3	16.39	0.147	.....	...	285	Piazzi xxi. 285
106 45 37.6	56.1	8	16.40	0.271	+ 0.28	2847	276	49 Capricorni, δ
65 3 37.1	55.7	4	16.41	0.221	.....	2851	279	Bradley 2851
19 19 58.9	56.7	10	16.42	0.067	— 0.08	2856	292	11 Cephei
65 5 1.2	57.8	3	— 16.43	— 0.221	.....	2852	284	Bradley 2852

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
2136	7.2	5.5	Bradley 2853	21 40 25.50	59.4	3	+ 2.844	+ 0.0020	.....
2137	...	...	78 Draconis	21 41 21	...	...	+ 0.776	- 0.0400	- 0.016
2138	9.7	1	Redhill 3322.....	21 43 0	...	...	- 6.900	- 1.7975	.....
2139	6.3	6	Piazzi xxi. 303.....	21 43 55.03	56.1	5	+ 3.334	- 0.0144	.....
2140	5.2	1	51 Capricorni, μ	21 45 39.61	57.1	6	3.259	- 0.0112	+ 0.021
2141	5.6	5.5	16 Pegasi	21 46 41.65	60.3	16	2.725	+ 0.0052	+ 0.001
2142	6.3	4	Piazzi xxi. 320.....	21 46 51.48	56.6	5	3.135	- 0.0063	.....
2143	10.3	1	*	21 47 43	...	...	2.960	- 0.0005	.....
2144	9.5	4	W.B. (1) XXI. 1125...	21 48 12.85	60.4	3	2.960	- 0.0005	.....
2145	7.1	6	Bradley 2868	21 48 24.15	57.2	5	2.014	+ 0.0078	0.000
2146	6.9	5	Bradley 2871	21 50 1.03	56.4	5	2.109	+ 0.0089	.....
2147	6.7	8.5	Bradley 2870	21 50 52.81	56.3	5	+ 3.148	- 0.0069	.....
2148	8.4	7	Redhill 3347.....	21 52 7.65	58.4	4	- 8.057	- 2.4886	.....
2149	7.4	2	W.B. (1) XXI. 1240...	21 53 32	...	...	+ 3.246	- 0.0109	.....
2150	8.9	3	Oeltz. Arg. (N.Z.) 23169	21 53 35.31	61.8	1	2.168	+ 0.0102	.....
2151	6.0	2	20 Pegasi	21 54 16.18	58.4	6	2.918	+ 0.0011	+ 0.005
2152	9.7	1	*	21 54 26	...	...	2.177	+ 0.0103	.....
2153	...	...	*	21 54 41	...	...	2.177	+ 0.0104	.....
2154	6.8	5.5	Bradley 2884	21 54 41.71	57.5	5	2.002	+ 0.0084	.....
2155	7.0	2	29 Aquarii.....	21 54 46.52	61.8	3	3.293	- 0.0133	0.000
2156	8.3	4.5	Lalande 42969	21 55 47.04	61.7	1	3.265	- 0.0120	.....
2157	6.3	9	Piazzi xxi. 383.....	21 56 42.93	59.3	8	2.189	+ 0.0106	.....
2158	5.5	3	16 Cephei	21 57 13.92	56.6	5	0.906	- 0.0363	- 0.023
2159	5.7	2	32 Aquarii.....	21 57 35.33	58.4	4	3.091	- 0.0045	.....
2160	3.0*	...	34 Aquarii, α	21 58 35.49	59.3	25	3.084	- 0.0042	- 0.003
2161	5.0*	...	22 Pegasi, ν	21 58 37.10	57.8	3	3.020	- 0.0018	+ 0.008
2162	4.7*	...	33 Aquarii, ι	21 58 52.40	57.4	10	3.247	- 0.0113	- 0.001
2163	6.6	4	15 Cephei	21 59 20.31	56.8	2	1.948	+ 0.0083	.....
2164	6.0	1	Piazzi xxi. 401	21 59 39	...	...	1.948	+ 0.0083	.....
2165	5.9	1.5	18 Cephei	21 59 41.38	57.4	3	1.788	+ 0.0049	- 0.006
2166	6.4	2.5	17 Cephei, ξ^1	21 59 43.35	54.7	1	1.702	+ 0.0026	} - 0.037
2167	4.6	1	17 Cephei, ξ^2	21 59 44.23	56.8	1	1.702	+ 0.0026	
2168	5.6	6	Piazzi xxi. 405	22 0 22.02	55.2	5	2.421	+ 0.0111	.....
2169	4.0*	...	24 Pegasi, ι	22 0 29.68	58.6	6	2.766	+ 0.0059	+ 0.021
2170	6.5	2	Groombridge 3681 ...	22 0 32	...	...	+ 2.416	+ 0.0111	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800 +		"	"	"			
73 27 5.5	59.2	4	— 16.45	— 0.231	.....	2853	...	Bradley 2853
18 19 17.6	61.8	1	16.50	— 0.057	+ 0.05	2861	302	78 Draconis
4 18 53.1	59.7	2	16.58	+ 0.573	.....	...	...	Redhill 3322
109 16 25.2	57.0	8	16.63	— 0.265	.....	...	303	Piazzi xxi. 303
104 12 32.5	58.1	7	16.71	0.256	— 0.02	2860	315	51 Capricorni, μ
64 43 55.2	58.4	9	16.76	0.211	+ 0.01	2864	321	16 Pegasi
94 55 52.2	56.2	5	16.77	0.244	.....	...	320	Piazzi xxi. 320
81 17 57.2	60.8	1	16.80	0.229	.....	...	...	*
81 13 3.4	59.4	3	16.83	0.228	.....	...	...	W.B. (1) XXI. 1125
34 26 48.1	56.6	7	16.84	0.153	.....	2868	336	Bradley 2868
36 43 48.0	57.2	5	16.92	0.159	.....	2871	346	Bradley 2871
96 5 12.2	55.9	8	16.95	— 0.238	.....	2870	345	Bradley 2870
3 38 22.9	59.4	3	17.02	+ 0.629	.....	...	...	Redhill 3347
103 41 38.7	57.7	2	16.96	— 0.246	.....	...	...	W.B. (1) XXI. 1240
37 48 54.6	59.8	4	17.08	0.159	.....	...	...	Oeltz Arg. (N.Z.) 23169
77 32 56.8	57.2	7	17.11	0.215	+ 0.05	2879	363	20 Pegasi
37 52 28.1	61.8	1	17.12	0.158	.....	...	...	*
37 50 43.8	57.8	1	17.13	0.158	.....	...	...	*
33 0 39.5	58.1	5	17.13	0.145	.....	2884	373	Bradley 2884
107 38	...	...	17.14	0.242	— 0.03	2878	365	29 Aquarii
105 37 35.7	61.3	4	17.18	0.239	.....	...	...	Lalande 42969
37 47 30.5	58.2	7	17.23	0.157	.....	...	383	Piazzi xxi. 383
17 29 10.3	57.0	5	17.25	0.060	+ 0.19	2900	394	16 Cephei
91 34 53.9	58.7	1	17.26	0.222	.....	2887	382	32 Aquarii
90 59 55.1	59.3	6	17.31	0.220	+ 0.02	2890	387	34 Aquarii, α
85 37 26.5	55.2	6	17.31	0.215	— 0.10	2891	388	22 Pegasi, ν
104 32 50.5	56.8	7	17.32	0.231	+ 0.07	2889	389	33 Aquarii, ι
30 51 48.8	58.7	4	17.34	0.136	.....	2902	399	15 Cephei
30 48 41.1	61.9	1	17.35	0.136	.....	...	401	Piazzi xxi. 401
27 33 39.8	57.8	4	17.35	0.123	.....	2906	...	18 Cephei
26 3 10.1	59.9	5	17.36	0.117	} — 0.08	...	...	17 Cephei, ξ^1
26 3 13.3	60.0	4	17.36	0.117		2907	408	17 Cephei, ξ^2
45 39 55.9	59.3	4	17.39	0.169	.....	...	405	Piazzi xxi. 405
65 20 13.7	57.1	3	17.39	0.194	— 0.02	2899	402	24 Pegasi, ι
45 25 53.8	61.9	2	— 17.39	— 0.168		...	...	Groombridge 3681

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				h.	m.	s.	1800+		s.	s.	s.
2171	5.4	3	19 Cephei	22	0	50.36	59.3	2	+ 1.844	+ 0.0064	+ 0.027
2172	6.0*	...	Lacaille 9040	22	2	0.91	58.7	2	3.437	- 0.0217	
2173	6.9	10	Bradley 2912	22	3	4.02	58.7	13	+ 3.124	- 0.0058	.....
2174	6.7	2	Groombridge 3707 ...	22	3	4	...	...	- 1.692	- 0.4011	.....
2175	4.0	2	26 Pegasi, θ	22	3	8.23	57.3	6	+ 3.009	- 0.0013	+ 0.021
2176	7.3	3	Bradley 2935	22	3	13	...	...	- 1.687	- 0.4009	.....
2177	6.6	2	Bradley 2913	22	3	15.63	59.0	6	+ 3.128	- 0.0060	.....
2178	7.4	2	Piazzi xxii. 11 (1st st.)	22	3	52.04	59.1	3	2.009	+ 0.0100	.....
2179	7.2	4	Piazzi xxii. 11 (2nd st.)	22	3	53.88	58.4	3	2.009	+ 0.0100	.....
2180	7.4	4	Piazzi xxii. 16	22	4	14.62	58.3	4	2.030	+ 0.0103	.....
2181	7.4	2	Bradley 2918	22	4	48.83	58.9	4	3.206	- 0.0096	.....
2182	6.9	5	Bradley 2920	22	5	26.41	57.7	5	3.132	- 0.0062	.....
2183	6.0	1	Piazzi xxii. 19	22	5	52.10	59.0	4	+ 3.381	- 0.0190	.....
2184	7.5	0.5	Redhill 3400	22	6	9	...	...	- 9.600	- 3.7898	.....
2185	5.0*	...	16 Piscis Australis, λ ..	22	6	22.36	55.8	2	+ 3.417	- 0.0213	+ 0.002
2186	5.9	5.5	Piazzi xxii. 29	22	6	36.42	59.8	3	2.645	+ 0.0094	.....
2187	5.9	4	Bradley 2926	22	6	45.50	54.7	1	2.127	+ 0.0120	.....
2188	5.5	2	22 Cephei, λ	22	6	45.71	57.8	2	2.028	+ 0.0108	.....
2189	5.0	3	24 Cephei	22	7	6.09	57.8	1	1.165	- 0.0218	+ 0.003
2190	9.0	4	Groomb. 3719 (1st st.)	22	7	24.34	57.8	1	1.391	- 0.0093	.....
2191	6.0	3.5	Groomb. 3719 (2nd st.)	22	7	26.50	57.8	2	1.391	- 0.0093	.....
2192	5.7	1	Bradley 2934	22	7	30.26	57.8	1	1.197	- 0.0197	.....
2193	4.5	1	43 Aquarii, θ	22	9	26.63	59.1	22	3.165	- 0.0077	+ 0.006
2194	5.0	0.5	23 Cephei, ϵ	22	9	53.15	56.7	5	2.144	+ 0.0127	+ 0.055
2195	6.3	8	Piazzi xxii. 61	22	11	23.54	56.3	5	2.149	+ 0.0130	.....
2196	9.3	2	Piazzi xxii. 65 (1st st.)	22	12	48	...	...	2.617	+ 0.0111	.....
2197	6.3	2	Piazzi xxii. 65 (2nd st.)	22	12	48.30	61.8	1	2.617	+ 0.0111	.....
2198	6.5	2.5	Lalande 43602	22	13	56.31	60.8	2	2.994	0.0000	.....
2199	3.7*	...	48 Aquarii, γ	22	14	25.41	58.4	18	3.094	- 0.0043	+ 0.007
2200	9.5	4	*	22	14	49.14	58.8	1	1.348	- 0.0120	.....
2201	9.2	2	*	22	14	53.79	58.8	1	1.352	- 0.0118	.....
2202	9.0	5.5	Groombridge 3744 ...	22	15	6.59	57.8	3	2.386	+ 0.0143	.....
2203	8.8	4	Radcliffe 5656	22	15	7.36	57.8	3	2.386	+ 0.0143	.....
2204	8.3	4	W.B. (1) XXII. 299...	22	15	9.24	58.7	3	2.998	0.0000	
2205	6.0	1	49 Aquarii	22	15	42.38	57.5	3	+ 3.352	- 0.0185	

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° ' "	1800+		"	"	"			
28 24 3'3	59'7	3	— 17'40	— 0'127	+ 0'04	2910	416	19 Cephei
118 58 42'5	57'8	3	17'45	0'239		...	...	Lacaille 9040
94 34 44'1	57'4	3	17'50	— 0'215	.....	2912	...	Bradley 2912
7 48 21'2	61'2	3	17'50	+ 0'128	.....	...	...	Groombridge 3707
84 29 21'7	56'7	6	17'50	— 0'207	— 0'04	2914	1	26 Pegasi, θ
7 48 16'7	60'6	5	17'51	+ 0'128	.....	2935	...	Bradley 2935
94 57 16'0	60'8	1	17'51	— 0'215	.....	2913	2	Bradley 2913
31 23 30'9	59'8	3	17'54	0'134	.....	...	11	Piazzi xxii. 11 (1st st.)
31 23 46'9	60'5	3	17'54	0'134	.....	...	...	Piazzi xxii. 11 (2nd st.)
31 50 3'4	57'7	3	17'56	0'136	.....	...	16	Piazzi xxii. 16
101 45 19'2	56'5	4	17'57	0'217	.....	2918	...	Bradley 2918
95 24 33'9	57'8	3	17'60	0'212	.....	2920	17	Bradley 2920
115 52 21'9	58'4	3	17'62	— 0'228	.....	...	19	Piazzi xxii. 19
2 52 43'7	61'8	2	17'62	+ 0'678	.....	...	...	Redhill 3400
118 27 34'7	55'7	4	17'64	— 0'230	— 0'02	2922	21	16 Piscis Australis, λ
56 5 3'4	57'0	5	17'65	0'176	.....	...	29	Piazzi xxii. 29
33 51 22'6	56'8	4	17'66	0'140	.....	2926	...	Bradley 2926
31 16 32'3	57'7	3	17'66	0'134	.....	2927	34	22 Cephei, λ
18 20 54'0	61'8	2	17'67	0'073	+ 0'03	2932	40	24 Cephei
20 33 36'3	60'6	5	17'69	0'089	.....	...	...	Groomb. 3719 (1st st.)
20 33 31'9	60'2	4	17'69	0'089	.....	...	...	Groomb. 3719 (2nd st.)
18 34 40'3	57'1	3	17'69	0'076	.....	2934	45	Bradley 2934
98 28 44'4	57'9	7	17'77	0'206	+ 0'03	2929	44	43 Aquarii, θ
33 39 13'9	56'9	4	17'79	0'137	— 0'02	2937	54	23 Cephei, ϵ
33 28 39'2	58'0	5	17'84	0'135	.....	...	61	Piazzi xxii. 61
52 56 12'7	61'8	3	17'90	0'164	.....	...	...	Piazzi xxii. 65 (1st st.)
52 55 57'1	61'8	3	17'90	0'164	.....	...	65	Piazzi xxii. 65 (2nd st.)
82 31 2'5	61'7	3	17'95	0'187	.....	...	70	Lalande 43602
92 5 28'5	57'3	10	17'97	0'193	— 0'02	2943	72	48 Aquarii, γ
18 57 53'1	60'3	4	17'98	0'079	.....	...	...	*
18 59 16'5	59'8	5	17'98	0'079	.....	...	...	*
40 43 17'9	61'5	3	17'99	0'146	.....	...	...	Groombridge 3744
40 43 54'9	61'8	2	17'99	0'146	.....	...	...	Radcliffe 5656
82 48 34'2	57'8	2	18'00	0'185		...	...	W.B. (1) XXII. 299
115 28 7'0	55'3	4	— 18'01	— 0'207		2945	78	49 Aquarii

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				h. m. s.	1800+		s.	s.	s.
2206	8.0	2	Redhill 3422.....	22 15 56.31	60.0	2	— 3.265	— 0.9096	
2207	6.7	6	33 Pegasi	22 16 55.38	58.5	4	+ 2.859	+ 0.0052	
2208	6.3	4.5	50 Aquarii.....	22 16 56.87	58.9	6	3.220	— 0.0107	+ 0.002
2209	4.3*	...	3 Lacertæ, β	22 18 3.57	56.6	11	2.348	+ 0.0151	+ 0.001
2210	5.8	2	52 Aquarii, π	22 18 7.60	61.8	4	3.065	— 0.0028	0.000
2211	6.8	3	53 Aquarii (1st star)...	22 18 57.79	57.4	6	3.251	— 0.0127	.....
2212	6.7	5	53 Aquarii (2nd star) .	22 18 58.34	56.9	7	3.251	— 0.0127	+ 0.011
2213	6.0	4	34 Pegasi	22 19 29.70	57.7	5	3.035	— 0.0014	.....
2214	9.9	1.5	*	22 19 46	...	...	2.866	+ 0.0054	.....
2215	5.3	4	35 Pegasi	22 20 46.21	58.3	6	3.033	— 0.0012	.....
2216	4.7	1	55 Aquarii, ζ (N. star)	22 21 37.22	58.1	3	3.079	— 0.0034	.....
2217	3.3	1	55 Aquarii, ζ (centre) .	22 21 37	...	...	3.079	— 0.0034	+ 0.009
2218	5.0	1	55 Aquarii, ζ (S. star)	22 21 37.25	59.3	2	3.079	— 0.0034	.....
2219	8.1	5.5	Lalande 43873 (1st st.)	22 21 38.56	57.7	3	3.177	— 0.0085	.....
2220	8.7	3	Lalande 43873(2ndst.)	22 21 39	...	...	3.177	— 0.0085	.....
2221	6.4	2.5	36 Pegasi	22 22 8.78	58.8	2	2.990	+ 0.0008	.....
2222	6.8	2	Bradley 2961	22 22 32.30	56.8	1	3.206	— 0.0103	.....
2223	6.3	2	37 Pegasi	22 22 53.24	57.3	4	3.036	— 0.0013	.....
2224	5.0	3	57 Aquarii, σ	22 23 14.12	58.6	9	3.182	— 0.0089	— 0.004
2225	6.1	2	38 Pegasi	22 23 37.89	58.8	3	2.733	+ 0.0103	.....
2226	5.0*	...	5 Lacertæ	22 23 42.03	55.5	5	+ 2.488	+ 0.0154	— 0.002
2227	5.7	9	Groombridge 3820 ...	22 23 52.86	58.6	24	— 3.697	— 1.1558	.....
2228	7.0	7	Cephei, δ^1	22 23 57.81	57.8	3	+ 2.212	+ 0.0164	+ 0.004
2229	Var.	...	27 Cephei, δ^2	22 23 58.66	56.7	2	2.212	+ 0.0164	+ 0.002
2230	6.3	2.5	58 Aquarii.....	22 24 15.82	59.5	3	+ 3.184	— 0.0090	.....
2231	6.7	13	Groombridge 3824 ...	22 24 22.75	57.9	17	— 3.836	— 1.2182	.....
2232	4.0	1	7 Lacertæ, α	22 25 31.73	57.5	6	+ 2.444	+ 0.0162	+ 0.015
2233	7.0	4	39 Pegasi	22 25 49.66	59.1	4	2.883	+ 0.0056	.....
2234	5.0	3	59 Aquarii, ν	22 27 2.01	57.5	5	3.279	— 0.0151	+ 0.013
2235	6.9	4	Piazzi xxii. 145.....	22 27 26.46	59.7	3	3.073	— 0.0029	.....
2236	3.7*	...	62 Aquarii, η	22 28 9.65	59.6	14	3.080	— 0.0032	+ 0.003
2237	5.9	2	Groombridge 3826 ...	22 28 59.35	57.3	2	+ 1.711	+ 0.0061	.....
2238	7.2	11	Radcliffe 5760	22 29 0.26	54.9	9	— 2.150	— 0.6686	.....
2239	7.0	4	Piazzi xxii. 158.....	22 29 4.59	59.3	2	+ 2.889	+ 0.0059	
2240	6.3	3	Groombridge 3827 ...	22 29 19.71	57.8	2	+ 1.683	+ 0.0050	

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0 1 11	1800+		"	"	"			
5 18	...	...	- 18.02	+ 0.217		...	...	Redhill 3422
69 51 27.7	56.2	7	18.06	- 0.174		2951	88	33 Pegasi
104 14 15.5	59.1	3	18.06	0.196	- 0.02	2949	86	50 Aquarii
38 28 17.7	56.2	5	18.11	0.140	+ 0.21	2956	95	3 Lacertæ, β
89 19 56.0	61.9	1	18.11	0.185	+ 0.01	2952	90	52 Aquarii, π
107 27 6.7	57.6	6	18.14	0.194	.....	2953	93	53 Aquarii (1st star)
107 27 11.2	57.3	6	18.14	0.194	- 0.01	2954	94	53 Aquarii (2nd star)
86 19 11.7	57.6	5	18.16	0.181	.....	2957	100	34 Pegasi
69 58 16.1	58.8	2	18.17	0.169	.....	...	...	*
86 0 18.0	57.1	3	18.21	0.178	.....	2959	107	35 Pegasi
90 44 7.0	59.8	6	18.24	0.179	.....	2960	111	55 Aquarii, ζ (N. star)
90 44 9.3	55.7	1	18.24	0.179	- 0.03	...	...	55 Aquarii, ζ (centre)
90 44 9.1	61.8	2	18.24	0.179	.....	...	...	55 Aquarii, ζ (S. star)
100 39 2.0	61.3	4	18.24	0.186	.....	...	...	Lalande 43873 (1st st.)
100 39 35.1	61.8	2	18.24	0.186	.....	...	...	Lalande 43873 (2nd st.)
81 35 5.6	59.3	4	18.26	0.173	.....	2962	116	36 Pegasi
103 37 51.7	60.1	3	18.27	0.185	.....	2961	...	Bradley 2961
86 16 42.3	59.1	4	18.28	0.175	.....	2965	121	37 Pegasi
101 23 35.7	56.2	6	18.30	0.182	- 0.05	2966	122	57 Aquarii, σ
58 8 34.2	59.5	4	18.31	0.155	.....	2968	129	38 Pegasi
43 0 32.1	58.3	4	18.31	- 0.140	+ 0.02	2970	132	5 Lacertæ
4 35 55.0	59.1	2	18.32	+ 0.228	.....	...	...	Groombridge 3820
32 18 42.3	58.8	6	18.32	- 0.123	.....	2972	134	Cephei, δ^1
32 18 2.7	58.3	6	18.32	0.123	+ 0.02	2973	135	27 Cephei, δ^2
101 37 19.2	60.6	4	18.33	- 0.181	.....	2967	130	58 Aquarii
4 29 4.4	59.9	2	18.34	+ 0.235	.....	2997	167	Groombridge 3824
40 26 11.4	58.8	3	18.38	- 0.135	0.00	2975	141	7 Lacertæ, α
70 29 23.5	56.1	4	18.39	0.161	.....	2974	140	39 Pegasi
111 25 27.1	57.0	4	18.43	0.181	+ 0.15	2976	143	59 Aquarii, ν
90 7 24.4	57.5	4	18.44	0.169	.....	...	145	Piazzi xxii. 145
90 50 17.2	58.3	6	18.47	0.168	+ 0.06	2979	151	62 Aquarii, η
20 48 40.0	57.1	3	18.50	- 0.089	.....	...	...	Groombridge 3826
5 39 15.3	61.5	3	18.50	+ 0.129	.....	...	...	Radcliffe 5760
70 26 39.8	59.5	4	18.50	- 0.155		...	158	Piazzi xxii. 158
20 20 56.6	59.3	3	- 18.51	- 0.087		...	...	Groombridge 3827

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				h. m. s.	1800+		s.	s.	s.
2241	7.0	3	8 Lacertæ (1st star)...	22 29 38.59	57.3	2	+ 2.657	+ 0.0137	
2242	6.2	1	8 Lacertæ (2nd star) .	22 29 38.93	57.8	2	2.657	+ 0.0137	
2243	5.8	1.5	Groombridge 3834 ...	22 29 48.49	57.8	2	+ 1.089	- 0.0326	.....
2244	7.5	14.5	Radcliffe 5776	22 30 6.89	57.0	12	- 8.048	- 3.7447	.....
2245	5.5	1	63 Aquarii, κ	22 30 30.27	57.9	6	+ 3.116	- 0.0052	- 0.007
2246	6.6	3.5	Lacaille 9204	22 31 56.22	57.4	5	3.350	- 0.0209	.....
2247	5.5	5	31 Cephei	22 32 18.45	58.0	5	1.447	- 0.0071	+ 0.043
2248	7.3	3	Groombridge 3843 ...	22 32 38.98	61.3	2	2.599	+ 0.0159	.....
2249	5.1	3	11 Lacertæ	22 34 22.87	57.0	6	2.608	+ 0.0161	+ 0.008
2250	3.3*	...	42 Pegasi, ζ	22 34 28.78	59.0	19	2.985	+ 0.0022	+ 0.001
2251	7.1	4.5	65 Aquarii.....	22 35 39.23	60.1	3	3.164	- 0.0081	.....
2252	3.0*	...	44 Pegasi, η	22 36 26.63	57.6	6	2.802	+ 0.0106	0.000
2253	6.6	6.5	45 Pegasi	22 38 39.65	56.0	5	2.916	+ 0.0061	.....
2254	5.1	1	46 Pegasi, ξ	22 39 41.96	58.5	9	2.979	+ 0.0031	.....
2255	5.9	5.5	68 Aquarii, g^2	22 40 1.73	57.3	5	3.242	- 0.0140	.....
2256	6.7	5	Piazzi xxii. 222.....	22 40 13.94	56.7	5	2.608	+ 0.0178	.....
2257	6.3	2	69 Aquarii, τ^1	22 40 16.49	61.8	3	3.192	- 0.0103	.....
2258	7.9	4.5	Bradley 3011 (1st st.).	22 40 36.94	56.8	2	3.112	- 0.0048	.....
2259	7.3	4	Bradley 3011 (centre).	22 40 37	...	...	3.112	- 0.0048	.....
2260	7.7	4	Bradley 3011 (2nd st.)	22 40 37.14	57.2	2	3.112	- 0.0048	.....
2261	6.7	1	70 Aquarii.....	22 41 7.92	57.8	2	3.162	- 0.0082	+ 0.002
2262	8.1	2.5	Groombridge 3888 ...	22 41 16.43	58.8	1	+ 2.614	+ 0.0180	.....
2263	9.7	2	Redhill 3487.....	22 42 3	...	...	-14.234	-11.2147	.....
2264	4.5	1	71 Aquarii, τ^2	22 42 10.57	60.8	8	+ 3.186	- 0.0100	- 0.004
2265	3.7	1	48 Pegasi, μ	22 43 14.90	60.8	5	2.878	+ 0.0088	+ 0.009
2266	3.7*	...	32 Cephei, ι	22 44 42.20	57.2	5	+ 2.127	+ 0.0222	- 0.012
2267	7.8	4	Redhill 3493.....	22 45 12.91	58.3	1	- 4.042	- 1.7050	.....
2268	5.3	3	49 Pegasi, σ	22 45 18.31	58.0	6	+ 3.003	+ 0.0022	.....
2269	4.0*	...	73 Aquarii, λ	22 45 18.52	61.2	2	3.135	- 0.0064	- 0.006
2270	5.8	6	15 Lacertæ	22 45 43.50	57.5	6	2.681	+ 0.0175	+ 0.010
2271	3.0*	...	76 Aquarii, δ	22 47 13.05	57.1	7	3.196	- 0.0111	- 0.007
2272	6.1	5	77 Aquarii.....	22 47 20.85	57.3	5	3.200	- 0.0115	.....
2273	6.5	3	1 Piscium	22 47 49.59	61.9	1	3.070	- 0.0018	.....
2274	1.3*	...	24 Piscis Australis, α .	22 49 54.40	57.8	10	3.308	- 0.0212	+ 0.022
2275	5.9	5	51 Pegasi	22 50 35.34	57.8	5	+ 2.927	+ 0.0076	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
51 5 43.9	59.5	6	— 18.52	— 0.141	.....	2981	163	8 Lacertæ (1st star)
51 5 20.7	60.8	5	18.52	0.141	.....	2982	164	8 Lacertæ (2nd star)
14 29 42.3	57.8	3	18.53	— 0.054	.....	...	...	Groombridge 3834
2 37 50.7	57.7	5	18.53	+ 0.456	.....	...	...	Radcliffe 5776
94 56 57.5	57.1	6	18.55	— 0.165	+ 0.11	2983	166	63 Aquarii, κ
119 3 6.1	56.8	6	18.59	0.175	.....	...	...	Lacaille 9204
17 5 0.3	58.3	5	18.61	0.072	— 0.04	2994	185	31 Cephei
46 24 55.3	61.8	3	18.62	0.133	.....	...	...	Groombridge 3843
46 27 12.4	59.3	8	18.67	0.130	0.00	2995	192	11 Lacertæ
79 53 54.9	59.1	7	18.68	0.151	0.00	2992	189	42 Pegasi, ζ
100 50 7.6	61.3	4	18.72	0.158	.....	2998	198	65 Aquarii
60 30 35.0	56.0	12	18.74	0.138	+ 0.04	3003	205	44 Pegasi, η
71 22 12.5	57.0	8	18.81	0.141	.....	3006	212	45 Pegasi
78 32 37.4	56.2	7	18.84	0.141	.....	3008	215	46 Pegasi, ξ
110 20 33.3	58.3	5	18.85	0.154	.....	3007	216	68 Aquarii, g ²
44 31 12.2	57.2	3	18.85	0.123	.....	...	222	Piazzi xxii. 222
104 47	...	...	18.86	0.151	.....	3009	218	69 Aquarii, τ ¹
94 57 18.5	60.8	5	18.87	0.146	.....	...	...	Bradley 3011 (1st st.)
94 57 17.2	60.6	6	18.87	0.146	.....	3011	219	Bradley 3011 (centre)
94 58 0.7	61.8	2	18.87	0.146	.....	...	...	Bradley 3011 (2nd st.)
101 17 38.7	58.1	3	18.88	0.148	— 0.02	3012	223	70 Aquarii
44 31 46.5	60.0	4	18.88	— 0.120	.....	...	...	Groombridge 3888
1 28 34.9	61.3	2	18.91	+ 0.701	.....	...	...	Redhill 3487
104 19 51.0	57.5	3	18.91	— 0.147	+ 0.02	3013	225	71 Aquarii, τ ²
66 8 11.5	59.8	5	18.94	0.130	+ 0.04	3016	231	48 Pegasi, μ
24 32 7.6	56.5	7	18.98	— 0.092	+ 0.14	3022	238	32 Cephei, ι
3 26 50.8	59.1	6	19.00	+ 0.197	.....	...	...	Redhill 3493
80 54 29.9	56.7	6	19.00	— 0.133	.....	3020	236	49 Pegasi, σ
98 19 27.2	61.9	2	19.00	0.138	— 0.03	3019	235	73 Aquarii, λ
47 25 50.0	57.2	5	19.01	0.116	0.00	3023	240	15 Lacertæ
106 33 52.0	58.7	8	19.05	0.138	0.00	3025	245	76 Aquarii, δ
107 0 47.4	56.3	5	19.06	0.138	.....	3026	247	77 Aquarii
89 40 51.2	61.9	2	19.07	0.131	.....	3030	249	1 Piscium
120 21 47.2	57.8	11	19.13	0.137	+ 0.18	3032	253	24 Piscis Australis, α
69 58 50.3	57.8	3	— 19.14	— 0.119		3035	257	51 Pegasi

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				h.	m.	s.	1800+		s.	s.	s.
2276	7.1	4	Redhill 3509.....	22	50	37.00	58.3	2	— 0.741	— 0.4045	
2277	5.7	2	Piazzii xxii. 262.....	22	51	55.95	57.2	5	+ 3.300	— 0.0210	
2278	6.2	3	Piazzii xxii. 264.....	22	52	13.27	57.8	3	3.168	— 0.0093	.....
2279	6.1	3	2 Piscium	22	52	16.94	58.4	5	3.071	— 0.0016	.....
2280	6.8	2.5	3 Piscium	22	53	27.15	58.4	3	+ 3.076	— 0.0020	0.000
2281	7.6	3	Redhill 3519.....	22	54	1.50	60.1	2	— 0.734	— 0.4238	.....
2282	6.1	5	Redhill 3520.....	22	54	10.01	59.6	3	0.952	— 0.4927	.....
2283	5.5	5.5	Groombridge 3970 ...	22	55	22.35	57.7	6	— 0.243	— 0.2960	.....
2284	4.8	3	4 Piscium, β	22	56	45.14	58.8	3	+ 3.053	0.0000	+ 0.001
2285	Var.	...	53 Pegasi, β	22	56	59.51	58.3	7	2.884	+ 0.0116	+ 0.014
2286	2.0*	...	54 Pegasi, α	22	57	47.33	60.6	22	2.980	+ 0.0056	+ 0.003
2287	6.0	2.5	83 Aquarii, h^1	22	57	51.62	58.8	3	3.125	— 0.0059	+ 0.007
2288	4.8	2	3 Andromedæ	22	57	54.37	58.6	5	2.656	+ 0.0230	.....
2289	6.8	2	Bradley 3067	22	58	48.94	59.9	2	1.067	— 0.0498	.....
2290	7.6	6	87 Aquarii, h^4	22	59	54.93	57.5	5	3.124	— 0.0059	.....
2291	7.0	3	Piazzii xxii. 306 (1st st.)	23	0	46.37	61.8	1	2.858	+ 0.0142	.....
2292	8.0	2	Piazzii xxii. 306 (2nd st.)	23	0	47	...	...	2.858	+ 0.0142	.....
2293	6.3	3	5 Andromedæ	23	1	24.30	58.4	5	2.689	+ 0.0233	.....
2294	5.5	1	5 Piscium, A	23	1	30.71	58.6	4	3.064	— 0.0006	+ 0.007
2295	6.8	2	Lacaille 9383	23	2	10.43	57.8	2	3.256	— 0.0192	.....
2296	7.2	4	Piazzii xxiii. 2	23	3	24.58	58.2	7	3.111	— 0.0048	.....
2297	6.0	4.5	2 Cassiopeiæ.....	23	3	45.46	57.8	3	2.540	+ 0.0299	+ 0.006
2298	8.1	3	Oeltz. Arg. (N.Z.) 25223	23	3	51.67	58.8	2	2.542	+ 0.0301	.....
2299	6.5	3.5	6 Andromedæ	23	3	59.47	59.4	4	2.772	+ 0.0204	.....
2300	9.5	1	Oeltz. Arg. (N.Z.) 25228	23	4	3.25	61.8	1	2.546	+ 0.0301	.....
2301	6.4	8	60 Pegasi	23	5	1.71	59.0	6	2.916	+ 0.0116	.....
2302	5.8	4	Bradley 3077	23	6	32.82	57.8	5	2.606	+ 0.0295	[+ 0.200]
2303	4.7	0.5	90 Aquarii, ϕ	23	7	4.19	58.0	6	3.109	— 0.0046	+ 0.001
2304	5.3	3.5	91 Aquarii, ψ^1	23	8	33.30	58.3	6	3.124	— 0.0062	+ 0.023
2305	6.3	5	Bradley 3085	23	9	39.43	59.5	3	2.089	+ 0.0346	.....
2306	4.2	2	6 Piscium, γ	23	9	54.42	60.2	22	3.059	+ 0.0004	+ 0.047
2307	6.2	3	Bradley 3084	23	10	20.08	58.8	3	2.698	+ 0.0279	.....
2308	4.7*	...	93 Aquarii, ψ^2	23	10	37.45	57.1	3	3.122	— 0.0061	.....
2309	5.4	1.5	95 Aquarii, ψ^3	23	11	40.70	58.5	3	3.123	— 0.0063	— 0.002
2310	7.9	1.5	Rumker 11001	23	11	42	...	...	+ 3.049	+ 0.0016	.....

2302. The proper motions are those of the B.A.C.

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
5 58 3.2	61.8	3	— 19.14	+ 0.040	.....	...	...	Redhill 3509
120 12 42.9	59.3	4	19.18	— 0.132	.....	...	262	Piazzi xxii. 262
103 49 14.6	59.8	4	19.19	0.127	.....	...	264	Piazzi xxii. 264
89 47 1.7	57.5	3	19.19	0.122	.....	3036	266	2 Piscium
90 33 56.4	57.8	3	19.21	— 0.120	— 0.01	3039	274	3 Piscium
5 42 2.6	59.5	3	19.23	+ 0.038	.....	...	...	Redhill 3519
5 22 37.5	58.8	3	19.23	0.047	.....	...	...	Redhill 3520
6 24 12.4	57.2	5	19.26	+ 0.018	.....	3058	295	Groombridge 3970
86 55 59.2	60.0	4	19.30	— 0.113	+ 0.02	3046	287	4 Piscium, β
62 40 32.0	57.2	5	19.30	0.106	— 0.15	3047	288	53 Pegasi, β
75 32 50.7	57.3	9	19.32	0.108	+ 0.02	3050	290	54 Pegasi, α
98 26 54.8	58.5	4	19.32	0.114	— 0.02	3048	289	83 Aquarii, h^1
40 42 30.9	58.5	3	19.33	0.096	.....	3052	293	3 Andromedæ
9 58 21.9	58.3	2	19.34	0.033	.....	3067	...	Bradley 3067
98 26 55.9	59.2	5	19.37	0.110	.....	3055	302	87 Aquarii, h^4
57 55 51.3	61.8	3	19.39	0.098	.....	...	306	Piazzi xxii. 306 (1st st.)
57 55 58.0	61.8	3	19.39	0.098	.....	...	...	Piazzi xxii. 306 (2nd st.)
41 27 59.5	56.6	4	19.40	0.092	.....	3064	312	5 Andromedæ
88 38 1.2	57.2	5	19.40	0.105	— 0.10	3059	310	5 Piscium, A
118 50 49.3	55.6	5	19.42	0.110	.....	...	...	Lacaille 9383
96 43 9.5	55.6	4	19.45	0.103	.....	...	2	Piazzi xxiii. 2
31 25 34.1	59.2	3	19.46	0.083	+ 0.02	3071	6	2 Cassiopeiæ
31 28 15.5	59.5	3	19.46	0.082	.....	...	...	Oeltz Arg. (N.Z.) 25223
47 12 25.0	56.1	4	19.46	0.091	.....	3070	7	6 Andromedæ
31 33	...	...	19.46	0.082	.....	...	...	Oeltz Arg. (N.Z.) 25228
63 54 29.1	56.8	9	19.48	0.094	.....	3073	11	60 Pegasi
33 36 16.4	57.1	6	19.51	0.081	[— 0.28]	3077	...	Bradley 3077
96 48 10.4	56.3	6	19.52	0.095	+ 0.19	3076	19	90 Aquarii, ϕ
99 50 59.7	56.0	6	19.55	0.093	+ 0.02	3078	22	91 Aquarii, ψ^1
16 31 54.1	59.4	5	19.58	0.060	.....	3085	...	Bradley 3085
87 28 56.6	58.1	6	19.58	0.088	+ 0.01	3082	31	6 Piscium, γ
37 32 26.9	59.2	4	19.59	0.077	.....	3084	...	Bradley 3084
99 56 47.2	60.3	4	19.59	0.089	+ 0.02	3083	33	93 Aquarii, ψ^2
100 22 33.4	60.5	4	19.61	0.087	— 0.01	3087	40	95 Aquarii, ψ^3
85 21 20.2	61.9	2	— 19.62	— 0.084	.....	...	...	Rumker 11001

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
2311	8.4	7.5	94 Aquarii (1st star)...	23 11 44.54	56.9	2	+ 3.143	- 0.0086	.....
2312	6.3	7.5	94 Aquarii (2nd star)...	23 11 44.73	58.3	2	3.143	- 0.0086	.....
2313	6.1	3	96 Aquarii.....	23 12 8.33	57.8	1	3.101	- 0.0038	+ 0.011
2314	7.2	4	Groombridge 4040 ...	23 12 49.77	57.9	4	2.182	+ 0.0393	.....
2315	4.8	3	34 Cephei, α	23 12 53.58	57.1	3	2.418	+ 0.0398	+ 0.019
2316	6.3*	...	Bradley 3094	23 13 7.82	58.1	3	2.775	+ 0.0251	.....
2317	6.0	1	62 Pegasi, τ	23 13 42.72	61.8	3	2.958	+ 0.0109	+ 0.001
2318	6.0	3	12 Andromedæ.....	23 14 8.25	57.8	3	2.869	+ 0.0187	.....
2319	7.5	5	W.B. (2) XXIII. 298 .	23 14 51.57	61.0	6	2.978	+ 0.0094	.....
2320	7.0	1	65 Pegasi	23 15 42.36	60.0	5	2.978	+ 0.0094	.....
2321	7.0	6	Bradley 3107	23 15 47.37	57.1	4	2.980	+ 0.0093	.....
2322	8.0	1	Piazzi xxiii. 69 (1st st.)	23 16 29.54	61.9	1	3.113	- 0.0055	.....
2323	7.5	2	Piazzi xxiii. 69 (2nd st.)	23 16 30.02	61.8	1	3.113	- 0.0055	.....
2324	7.2	3.5	Bradley 3109	23 16 54.98	58.5	6	2.918	+ 0.0158	.....
2325	6.1	6	67 Pegasi	23 18 0.05	59.3	4	2.922	+ 0.0160	0.000
2326	4.7*	...	68 Pegasi, ν	23 18 23.78	58.0	4	2.971	+ 0.0111	+ 0.013
2327	8.8	5.5	W.B. (2) XXIII. 371 .	23 18 28.36	59.1	3	2.923	+ 0.0160	.....
2328	8.8	7.5	Radcliffe 6075	23 19 3.98	54.8	6	0.190	- 0.3118	.....
2329	5.4	5	8 Piscium, κ	23 19 45.32	60.2	21	3.070	- 0.0001	+ 0.005
2330	7.1	7	Piazzi xxiii. 96	23 22 17.75	58.1	6	3.092	- 0.0030	.....
2331	6.8	14	Radcliffe 6099	23 24 12.11	57.5	12	0.339	- 0.3009	.....
2332	6.8	2.5	Piazzi xxiii. 103	23 24 17.56	57.4	5	3.090	- 0.0026	.....
2333	5.9	4	14 Andromedæ.....	23 24 24.83	58.3	6	2.907	+ 0.0207	.....
2334	7.7	12	Radcliffe 6108	23 25 51.51	55.6	9	0.690	- 0.1942	.....
2335	7.8	8	W.B. (1) XXIII. 544 .	23 27 13.75	61.6	8	3.065	+ 0.0012	.....
2336	7.4	8	Radcliffe 6117	23 27 15.34	57.6	4	+ 0.488	- 0.2726	.....
2337	5.6	2	Groombridge 4101 ...	23 27 49.69	58.2	6	- 0.017	- 0.4925	.....
2338	6.0	4	16 Piscium	23 29 14.62	59.1	6	+ 3.068	+ 0.0009	- 0.006
2339	7.4	9	Radcliffe 6129	23 29 48.18	59.2	8	0.886	- 0.1547	.....
2340	6.4	5	Piazzi xxiii. 133	23 30 23.89	58.0	5	3.114	- 0.0073	.....
2341	7.0	7	74 Pegasi	23 30 34.41	58.0	5	3.023	+ 0.0084	.....
2342	4.3	4	16 Andromedæ, λ	23 30 43.19	57.2	5	2.897	+ 0.0272	+ 0.017
2343	4.3*	...	17 Piscium, ι	23 32 45.00	59.8	18	3.059	+ 0.0029	+ 0.025
2344	3.3*	...	35 Cephei, γ	23 33 37.69	58.4	7	2.415	+ 0.0734	- 0.020
2345	6.2	2	Piazzi xxiii. 153	23 33 53.90	60.5	3	+ 3.105	- 0.0064	.....

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazz.	Name of Star.
° ' "	1800+		"	"	"			
104 13 1'5	61'4	5	— 19'61	— 0'089	.....	...	...	94 Aquarii (1st star)
104 13 14'5	60'1	7	19'61	0'089	.....	3088	42	94 Aquarii (2nd star)
95 53 21'9	57'6	5	19'62	0'085	+ 0'01	3090	46	96 Aquarii
17 4 33'4	57'9	1	19'63	0'058	.....	...	...	Groombridge 4040
22 39 16'0	57'2	5	19'63	0'064	— 0'02	3097	53	34 Cephei, σ
42 23 8'6	58'1	3	19'64	0'075	.....	3094	51	Bradley 3094
67 1 31'4	57'8	3	19'65	0'078	+ 0'01	3096	56	62 Pegasi, τ
52 34 52'9	55'3	4	19'66	0'076	.....	3099	59	12 Andromedæ
70 7 41'0	59'2	3	19'67	0'076	.....	...	...	W.B. (2) XXIII. 298
69 56 17'0	60'4	2	19'68	0'076	.....	3106	65	65 Pegasi
70 12 28'6	59'8	3	19'68	0'076	.....	3107	...	Bradley 3107
99 13 41'2	61'8	3	19'70	0'078	.....	...	...	Piazz. xxiii. 69 (1st st.)
99 13 39'4	61'8	3	19'70	0'078	.....	...	69	Piazz. xxiii. 69 (2nd st.)
58 14 16'2	59'2	3	19'70	0'072	.....	3109	71	Bradley 3109
58 23 1'2	58'2	5	19'72	0'069	0'00	3111	75	67 Pegasi
67 21 57'6	57'2	3	19'73	0'070	— 0'03	3114	77	68 Pegasi, ν
58 17 58'6	58'4	3	19'73	— 0'069	.....	...	...	W.B. (2) XXIII. 371
4 42 40'7	59'1	4	19'74	+ 0'003	.....	...	...	Radcliffe 6075
89 30 38'7	57'7	9	19'75	— 0'070	+ 0'12	3116	83	8 Piscium, κ
95 17 41'9	57'1	4	19'79	— 0'066	.....	...	96	Piazz. xxiii. 96
4 21 12'1	56'4	5	19'81	+ 0'001	.....	...	...	Radcliffe 6099
94 51 8'5	56'8	8	19'82	— 0'062	.....	...	103	Piazz. xxiii. 103
51 31 56'9	57'7	6	19'82	0'052	.....	3128	107	14 Andromedæ
4 45 47'0	59'5	8	19'83	0'006	.....	...	...	Radcliffe 6108
88 46 15'5	61'8	3	19'85	0'055	.....	...	119	W.B. (1) XXIII. 544
4 12 52'9	59'0	5	19'85	— 0'001	.....	...	...	Radcliffe 6117
3 27 55'7	57'6	4	19'86	+ 0'012	.....	3147	135	Groombridge 4101
88 40 28'6	58'1	3	19'88	— 0'051	— 0'06	3139	132	16 Piscium
4 35 43'0	59'0	5	19'88	0'008	.....	...	...	Radcliffe 6129
103 50 10'5	57'4	3	19'88	0'051	.....	...	133	Piazz. xxiii. 133
73 56 56'6	60'3	4	19'89	0'048	.....	3141	134	74 Pegasi
44 18 1'7	60'4	4	19'89	0'045	+ 0'43	3143	138	16 Andromedæ, λ
85 7 56'3	58'4	13	19'91	0'044	+ 0'45	3148	145	17 Piscium, ι
13 8 58'2	58'1	10	19'92	0'032	— 0'15	3152	155	35 Cephei, γ
102 27 25'4	58'4	2	— 19'93	— 0'043	.....	...	153	Piazz. xxiii. 153

No.	Mag.	Number of Esti- mations of Mag.	Name of Star.	Mean R.A. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of R.A.	Annual Precession in R.A. for 1860.	Secular Variation of Precession in R.A.	Annual Proper Motion in R.A.
				h. m. s.	1800+		s.	s.	s.
2346	5.0*	...	18 Piscium, λ	23 34 54.19	57.8	3	+ 3.069	+ 0.0010	- 0.011
2347	5.5	4	105 Aquarii, ω^2	23 35 27.64	59.4	5	3.111	- 0.0079	.....
2348	7.4	7	Oeltz.Arg.(N.Z.)25960	23 36 35.71	58.1	4	2.860	+ 0.0405	.....
2349	5.0	1	78 Pegasi	23 36 57.29	57.6	5	2.999	+ 0.0161	+ 0.006
2350	7.7	10	Radcliffe 6172	23 38 17.11	56.6	11	1.710	+ 0.0375	.....
2351	6.0	1	107 Aquarii, i^2 (1st st.)	23 38 44.18	61.8	2	3.116	- 0.0102	0.000
2352	7.3	1	Aquarii, i^2 (2nd st.)	23 38 44.50	61.8	1	3.116	- 0.0102	.....
2353	5.6	2	19 Piscium	23 39 14.35	60.3	6	3.066	+ 0.0021	- 0.004
2354	9.6	9	Redhill 3653	23 39 51.78	55.2	8	1.843	+ 0.0638	.....
2355	6.0	2	20 Piscium	23 40 44.68	58.3	4	3.079	- 0.0010	+ 0.002
2356	4.5*	...	Sculptoris, δ	23 41 37.64	59.0	5	3.131	- 0.0162	.....
2357	6.2	6	21 Piscium	23 42 17.26	60.4	5	3.072	+ 0.0011	- 0.002
2358	7.6	2	Redhill 3661	23 42 38.13	59.2	1	2.058	+ 0.1028	.....
2359	6.0	4	Piazzi xxiii. 203	23 43 19.87	56.4	5	3.098	- 0.0073	.....
2360	6.7	3	Piazzi xxiii. 204	23 43 23.59	57.6	5	2.954	+ 0.0345	.....
2361	5.9	4	22 Piscium	23 44 47.87	60.2	5	3.069	+ 0.0022	- 0.001
2362	7.0	4	Bradley 3181	23 45 16.94	57.2	3	2.706	+ 0.0981	.....
2363	6.7	6	Groombridge 4154 ...	23 45 37.09	58.9	3	2.764	+ 0.0888	.....
2364	7.8	3.5	Piazzi xxiii. 216	23 45 49.66	61.9	2	3.056	+ 0.0069	.....
2365	7.3	3.5	Piazzi xxiii. 217	23 45 50.81	61.8	1	3.056	+ 0.0069	.....
2366	7.0	0.5	26 Piscium	23 47 58	...	...	3.064	+ 0.0045	+ 0.002
2367	6.5	5.5	Groombridge 4163 ...	23 48 3.76	58.0	6	2.835	+ 0.0872	.....
2368	6.9	6	Bradley 3187	23 49 57.54	58.9	3	2.633	+ 0.1615	.....
2369	9.0	2	Piazzi xxiii. 240 (1st st.)	23 50 56	...	...	3.049	+ 0.0142	.....
2370	7.5	2	Piazzi xxiii. 240 (2nd st.)	23 50 56.19	61.8	1	3.049	+ 0.0142	.....
2371	6.9	2.5	1 Ceti	23 51 8.95	58.5	3	3.087	- 0.0077	.....
2372	Var.	...	Cassiopeiæ (R)	23 51 18.50	56.0	5	3.010	+ 0.0363	.....
2373	5.6	4	27 Piscium	23 51 30.31	58.7	8	3.076	- 0.0008	- 0.008
2374	4.0	2	28 Piscium, ω	23 52 7.34	60.8	11	3.067	+ 0.0046	+ 0.010
2375	7.6	6	Lalande 47038	23 52 26.47	57.8	3	3.019	+ 0.0359	.....
2376	6.9	5	Piazzi xxiii. 249	23 52 29.65	57.8	2	3.077	- 0.0021	.....
2377	6.5	2	Piazzi xxiii. 250	23 52 38.06	61.8	3	3.064	+ 0.0069	.....
2378	7.0	2.5	Groombridge 4193 ...	23 53 2.15	58.3	7	2.501	+ 0.2652	.....
2379	7.3	2.5	Bradley 3193	23 53 36.67	58.8	1	3.003	+ 0.0535	.....
2380	4.8	4	30 Piscium	23 54 46.77	58.2	7	+ 3.076	- 0.0020	+ 0.002

Mean N.P.D. 1860, Jan. 1.	Mean Year and Frac- tion of Year.	Number of Obs. of N.P.D.	Annual Precession in N.P.D. for 1860.	Secular Variation of Precession in N.P.D.	Annual Proper Motion in N.P.D.	No. in Bessel's Bradley.	Hourly No. in Piazzi.	Name of Star.
° ' "	1800+		"	"	"			
88 59 26.2	55.8	5	— 19.94	— 0.040	+ 0.17	3153	158	18 Piscium, λ
105 19 8.8	58.0	5	19.94	0.040	.....	3154	159	105 Aquarii, ω^2
32 42 55.9	58.2	3	19.95	0.034	.....	...	164	Oeltz. Arg. (N.Z.) 25960
61 24 49.3	57.3	4	19.96	0.035	+ 0.04	3160	166	78 Pegasi
5 18 28.1	58.8	3	19.97	0.015	.....	...	...	Radcliffe 6172
109 27	...	...	19.97	0.037	+ 0.02	3161	177	107 Aquarii, i^2 (1st st.)
109 27	...	...	19.97	0.033	.....	...	...	Aquarii, i^2 (2nd st.)
87 17 22.8	58.2	5	19.97	0.032	+ 0.03	3162	182	19 Piscium
5 27 11.0	56.6	4	19.98	0.015	.....	...	...	Redhill 3653
93 32 23.4	58.2	3	19.99	0.029	+ 0.01	3165	188	20 Piscium
118 54 19.7	61.8	3	19.99	0.028	.....	...	192	Sculptoris, δ
89 42 4.1	59.2	3	20.00	0.026	+ 0.04	3167	197	21 Piscium
5 42 0.1	61.8	3	20.00	0.014	.....	...	...	Redhill 3661
105 10 45.4	59.5	4	20.00	0.024	.....	...	203	Piazzi xxiii. 203
39 9 20.7	57.2	3	20.00	0.022	.....	...	204	Piazzi xxiii. 204
87 50 53.7	59.7	4	20.01	0.021	+ 0.03	3174	209	22 Piscium
13 10 34.1	56.7	5	20.01	0.016	+ 0.11	3181	...	Bradley 3181
15 14 12.6	59.6	4	20.02	0.016	.....	...	218	Groombridge 4154
78 51 7.3	61.8	3	20.02	0.019	.....	...	216	Piazzi xxiii. 216
78 51 10.4	61.8	3	20.02	0.019	.....	...	217	Piazzi xxiii. 217
83 42 28.9	61.9	1	20.03	0.015	+ 0.02	3183	228	26 Piscium
16 22 7.9	56.2	7	20.03	0.013	.....	...	...	Groombridge 4163
7 35 17.7	58.8	4	20.04	0.008	.....	3187	...	Bradley 3187
66 25 47.7	61.9	3	20.04	0.009	.....	...	240	Piazzi xxiii. 240 (1st st.)
66 25 53.2	61.9	3	20.04	0.009	.....	...	...	Piazzi xxiii. 240 (2nd st.)
106 37 36.4	58.2	5	20.04	0.008	.....	3188	243	1 Ceti
39 23 27.3	56.6	5	20.04	0.008	.....	...	...	Cassiopeiæ (R)
94 19 57.9	56.3	6	20.04	0.008	.....	3189	244	27 Piscium
83 54 43.9	59.7	6	20.04	0.007	+ 0.13	3191	246	28 Piscium, ω
39 56 49.1	61.4	3	20.04	0.006	.....	...	...	Lalande 47038
96 40 13.7	59.5	3	20.04	0.006	.....	...	249	Piazzi xxiii. 249
79 30	...	...	20.04	0.005	.....	...	250	Piazzi xxiii. 250
4 4 24.5	59.6	4	20.05	0.002	.....	3194	...	Groombridge 4193
28 36 7.8	59.5	3	20.05	0.005		3193	...	Bradley 3193
96 47 34.1	59.8	4	— 20.05	— 0.002	+ 0.04	3197	256	30 Piscium

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				h. m. s.	1800+		s.	s.	s.
2381	6.1	5	85 Pegasi	23 54 51.68	57.3	4	+ 3.057	+ 0.0162	[+ 0.067]
2382	7.9	7.5	Radcliffe 6276	23 55 28.93	55.9	6	2.670	+ 0.3385	
2383	5.5	1	2 Ceti	23 56 33.84	61.9	4	3.079	- 0.0081	- 0.001
2384	5.2	1	33 Piscium	23 58 10.14	57.4	7	3.073	- 0.0016	- 0.002
2385	6.4	7	Bradley 3212	23 59 21.19	57.8	6	3.070	+ 0.0178	[+ 0.020]
2386	8.8	11	Radcliffe 6314	23 59 53.67	55.5	6	+ 3.064	+ 0.4277	

2381. The proper motions are taken from the B.A.C.
2385. The proper motion in R.A. is deduced from comparison with Robinson.

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° ' "	1800+		"	"	"			
63 39 33.8	60.1	3	— 20.05	— 0.002	[+ 0.95]	3198	257	85 Pegasi
3 44 50.0	56.0	3	20.05	+ 0.001		...	...	Radcliffe 6276
108 7	...	...	20.05	0.002	0.00	3204	264	2 Ceti
96 29 27.9	57.0	7	20.06	0.005	— 0.03	3208	272	33 Piscium
61 45 3.5	56.4	6	20.06	0.007	+ 0.19	3212	276	Bradley 3212
3 59 30.3	57.3	6	— 20.06	+ 0.009		...	...	Radcliffe 6314

Johnson, Manuel John

The Radcliffe Catalogue of 6317 stars, chiefly circumpolar, reduced to the epoch 1845. O; formed from the observations made at the Radcliffe Observatory, under the superintendence of Manuel John Johnson With introduction by Robert Main
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